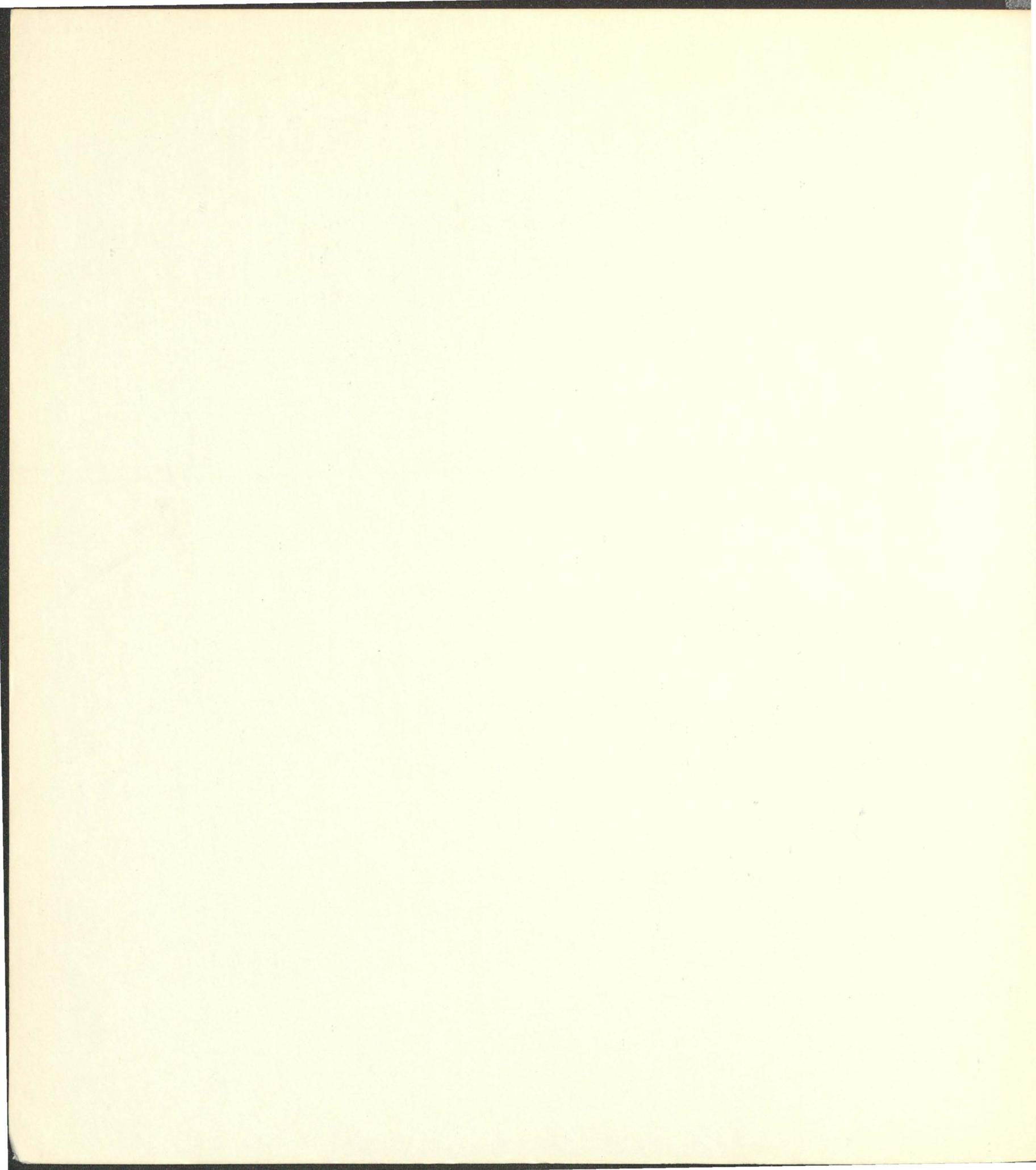


# The New York- New Jersey Metropolitan Area

# Industrial Development Guide

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The New York-  
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Metropolitan Area

Industrial  
Development  
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Greetings From The Governors

The Honorable William T. Cahill  
Governor, State of New Jersey

The Honorable Nelson A. Rockefeller  
Governor, State of New York

We welcome your attention to the New York-New Jersey Metropolitan Area as a region worthy of your interest and business enterprise. The kind of economic growth that this Area has enjoyed is no accident; it is the result of New Jersey and New York State policies designed to foster industry and business.

We endorse this guide because it is in support of the desire, shared by both States, to promote the industrial future of the Metropolitan Area in which both New Jersey and New York have a high stake.



*William T. Cahill*  
*Nelson A. Rockefeller*

## The Port of New York Authority

The Port of New York Authority is a joint public agency of the States of New Jersey and New York. It was created by a Compact between the two States in 1921 as a financially self-supporting agency capable of developing and operating terminal, transportation and other facilities of commerce within the New Jersey-New York Port District.

The facilities operated by the Port Authority in accordance with the directions of the two States are:

Tunnels and Bridges	Holland Tunnel
	Lincoln Tunnel
	George Washington Bridge
	Goethals Bridge
	Outerbridge Crossing
	Bayonne Bridge
Rail and Bus Commuter Facilities	Port Authority Bus Terminal
	Port Authority Trans-Hudson (PATH) System
	George Washington Bridge Bus Station
Regional Airports	John F. Kennedy International Airport
	LaGuardia Airport
	Newark Airport
	Teterboro Airport
	Port Authority—West 30th Street Heliport
	Port Authority—Downtown Heliport
Marine Terminals and Other Facilities	Elizabeth—Port Authority Marine Terminal
	Port Newark
	Hoboken—Port Authority Marine Terminal
	Brooklyn—Port Authority Marine Terminal
	Erie Basin—Port Authority Marine Terminal
	Columbia Street Marine Terminal
	Port Authority Building
	New York Union Motor Truck Terminal
	Newark Union Motor Truck Terminal
World Trade	The World Trade Center

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William J. Ronan

W. Paul Stillman

The Industrial Development Guide is addressed to the industrialist in a frank bid to consider the New York-North-eastern New Jersey Metropolitan Area as a place for producing and marketing his goods. It portrays the industrial and economic environment of the Area and its sub-divisions.

The Metropolitan Area has much to offer. It contains an industrial complex of the first order of magnitude. Its production is large and varied because the market it serves is global. It is the hub of commerce, and offers the industrialist an unmatched array of services to facilitate the conduct of all phases of his business. In the Metropolitan Area, new opportunities for industrial growth are developing along the directions indicated by changes in regional and world demand.

It is hoped that the Guide will also be of assistance to the state, county and local agencies involved in industrial development as a means of promoting and protecting the commerce of the bi-state Area which is so important to its business activity and well-being.

*James C. Kellogg III*

James C. Kellogg III, Chairman  
The Port of New York Authority

December, 1971

The Port of New York Authority  
One World Trade Center  
New York, New York 10048



This Industrial Development Guide concentrates upon presenting the salient characteristics of the Metropolitan Area as a whole and its principal subdivisions.

The spirit of the Guide is thus to allow the industrialist to make an overall evaluation on the basis of the facts here presented. In selecting a locality or a site, he is referred to the state, county and local agencies that stand ready to furnish further assistance. Particular reliance has been placed on the planning commissions, in recognition of the vital role they have in directing the economic development of their communities.

In the appropriate sections, he is also referred to various other agencies and groups that can assist in dealing with matters concerning the availability of labor, power and fuel, water, and with the regulations and standards involved in environmental protection. With respect to the latter consideration, the industrialist will understand that the suitability of any specific activity in any locality will depend upon regional, state and other controls and specifications.

In a metropolitan community as large as the New York-Northeastern New Jersey Metropolitan Area, encompassing a large number of highly diverse communities and localities, it is not possible, within the limitations of a volume of this size, to present in detail all the factors affecting industrial location in each of the constituent communities. The Guide is an analysis of a comprehensive compilation of the most recent information available, assembled from sources believed to be reliable. Predictions as to future trends and developments represent expectations similarly predicated on currently available data.

The Industrial Development Guide is a project of The Port Authority's Central Research and Statistics Division, Warren B. Lovejoy, Chief, in the Planning and Development Department, Roger H. Gilman, Director. The Guide was developed and prepared in the Regional Studies Section of that Division, under the direction of Carl A. Franzmann.

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The staff is indebted to Dr. Dorothy A. Muncy, Consulting City Planner, whose expertise in the field of industrial studies—location, zoning and space analyses—was of great assistance in the overall preparation of the Guide and, in particular, in the assembly of the inventories of Vacant Industrial Land, which were contributed by the city and county Planning Commissions using the criteria developed by Dr. Muncy.

Gratefully appreciated are the comments and support of Mr. Ronald M. Heymann, Commissioner, New Jersey State Department of Labor and Industry, and Mr. Herman C. Simonse, Director, Division of Economic Development, New Jersey State Department of Labor and Industry, and of Mr. Neal L. Moylan, Commissioner, and Mr. William E. Zimmerman, Deputy Commissioner, New York State Department of Commerce.

A great part of the statistical data contained in this report was collected and published by the Bureau of the Census and by the Office of Business Economics, both agencies of the United States Department of Commerce.

Also greatly appreciated is the assistance of the following agencies in providing data required for the preparation of this report:

Engineers' Council for Professional Development  
Maritime Association of The Port of New York  
Middle States Association of Colleges and Secondary Schools  
National Merit Scholarship Corporation  
New Jersey State Department of Education  
New Jersey State Department of Environmental Protection  
New Jersey State Department of Labor and Industry  
New York State Department of Commerce  
New York State Department of Education  
New York State Department of Environmental Conservation  
Science Clubs of America  
Tri-State Regional Planning Commission  
Woodrow Wilson National Fellowship Foundation

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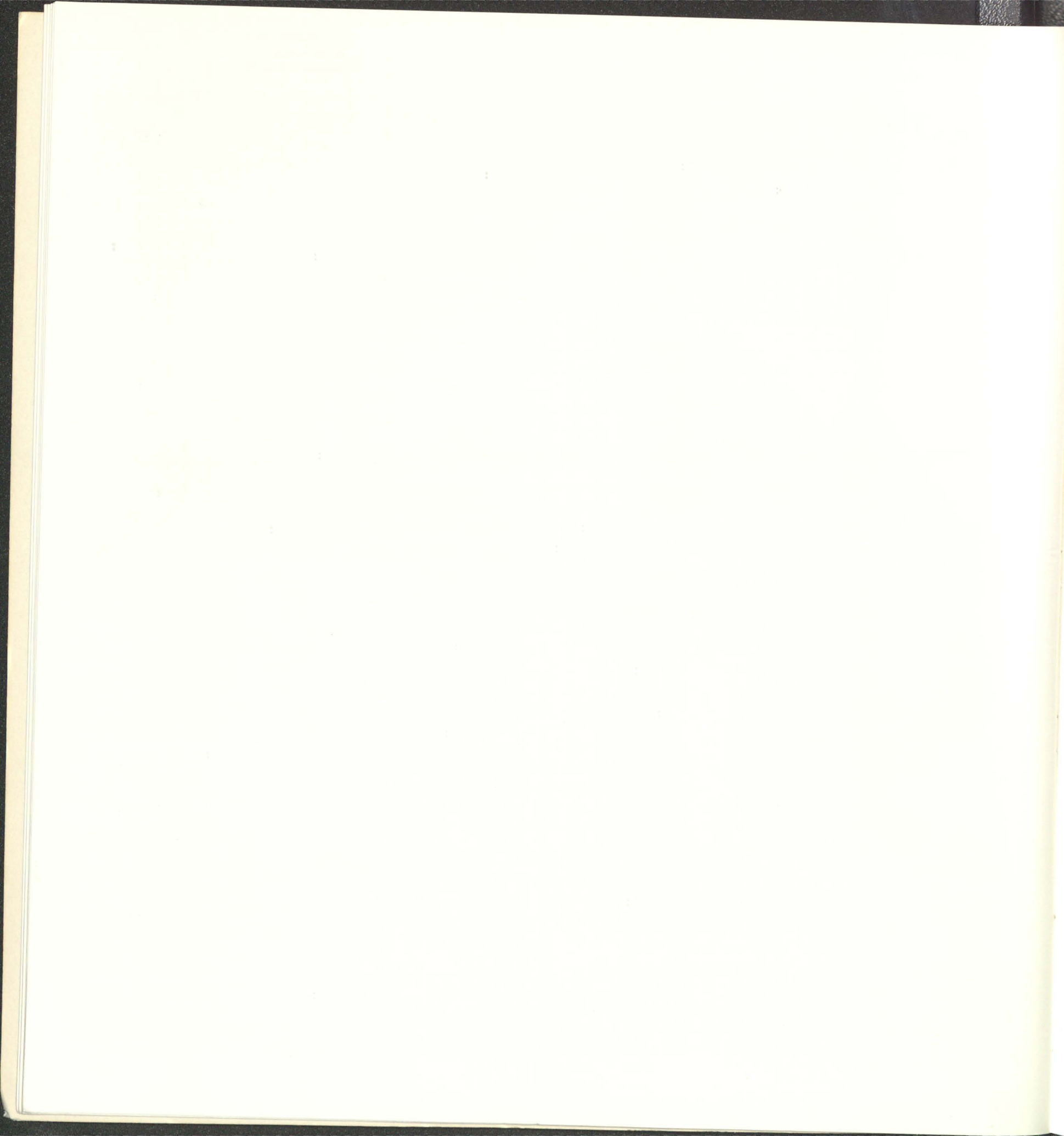
Table of Contents

The Area's Industrial Leadership		13	
	Diversity	15	
	Employment	17	
	Plants	21	
	Production	23	
	Capital Expenditures	27	
	Value Added and Labor Costs	31	
The Area's Economy		35	
	The Role of Trade	36	
	The Role of Location	39	
	The Role of Investment	39	
	Population	40	
	Jobs	41	
	Jobs as Related to Population	43	
	Personal Income	43	
	Economic Stability	46	
	The Outlook	48	
	Investment for Growth	49	
The Area's Markets		51	
	The \$20 Billion Industrial Market	53	
	The \$10 Billion Service and Institutional Market	53	
	The \$21 Billion Consumer Market	56	
	Production for Export—A High Potential Market	57	
The Labor Supply		59	
	The Resident Labor Force	63	
	How the Area's Labor Force is Employed	63	
	Area-Wide Inventory of Skills	65	
		Professional and Technical	66
		Sales	66
		Craftsmen	67
		Managerial and Administrative	67
		Service Workers and Laborers	67
		Operatives	68
		Clerical	68
		A Synopsis of Skills Employed by Manufacturing Industries in the Local Labor Markets	69
	The Emerging Labor Force	70	
	Labor Recruitment Assistance	71	
Education		75	
	Grade and High School Education	77	
	Vocational Training	79	
	Colleges and Universities	83	
	Schools of Engineering and Technology	91	

Table of Contents (Continued)

Industrial Localities		95
	The Northern New Jersey Industrial Belt	Newark-Perth Amboy District 101
		Bergen-Passaic District 103
		Hudson County District 105
	Suburban Industrial Settlement in New Jersey	Essex, Morris, Union 107
		Middlesex, Somerset, Monmouth 107
		Bergen-Passaic 107
	The New York Industrial Belt	Manhattan District 109
		Western Brooklyn-Western Queens District 112
		Bronx District 113
	Suburban Industrial Settlement in New York	Long Island 115
		Staten Island 117
		Westchester-Rockland 118
Space for Industry		121
	Vacant Land	Types of Industrial Zoning 123
		Size of Tracts 123
		Transport Orientation 124
	Vacant Land: Hackensack River Meadows	125
	Industrial Parks	125
	Space for Reoccupancy	125
	County Space Profiles	Bergen 126
		Essex 131
		Hudson 135
		Middlesex 139
		Monmouth 145
		Morris 149
		Passaic 154
		Somerset 158
		Union 162
		Bronx 166
		Brooklyn 169
		Manhattan 173
		Queens 176
		Staten Island 180
		Nassau 184
		Rockland 189
		Suffolk 193
		Westchester 198
Transportation Services		203
	Air Transportation	206
	Marine Transportation	209
	Rail Transportation	211
	Trailers-on-Flat Car (TOFC)	214
	Trucking Services	215
	Commercial Exempt Zones	215

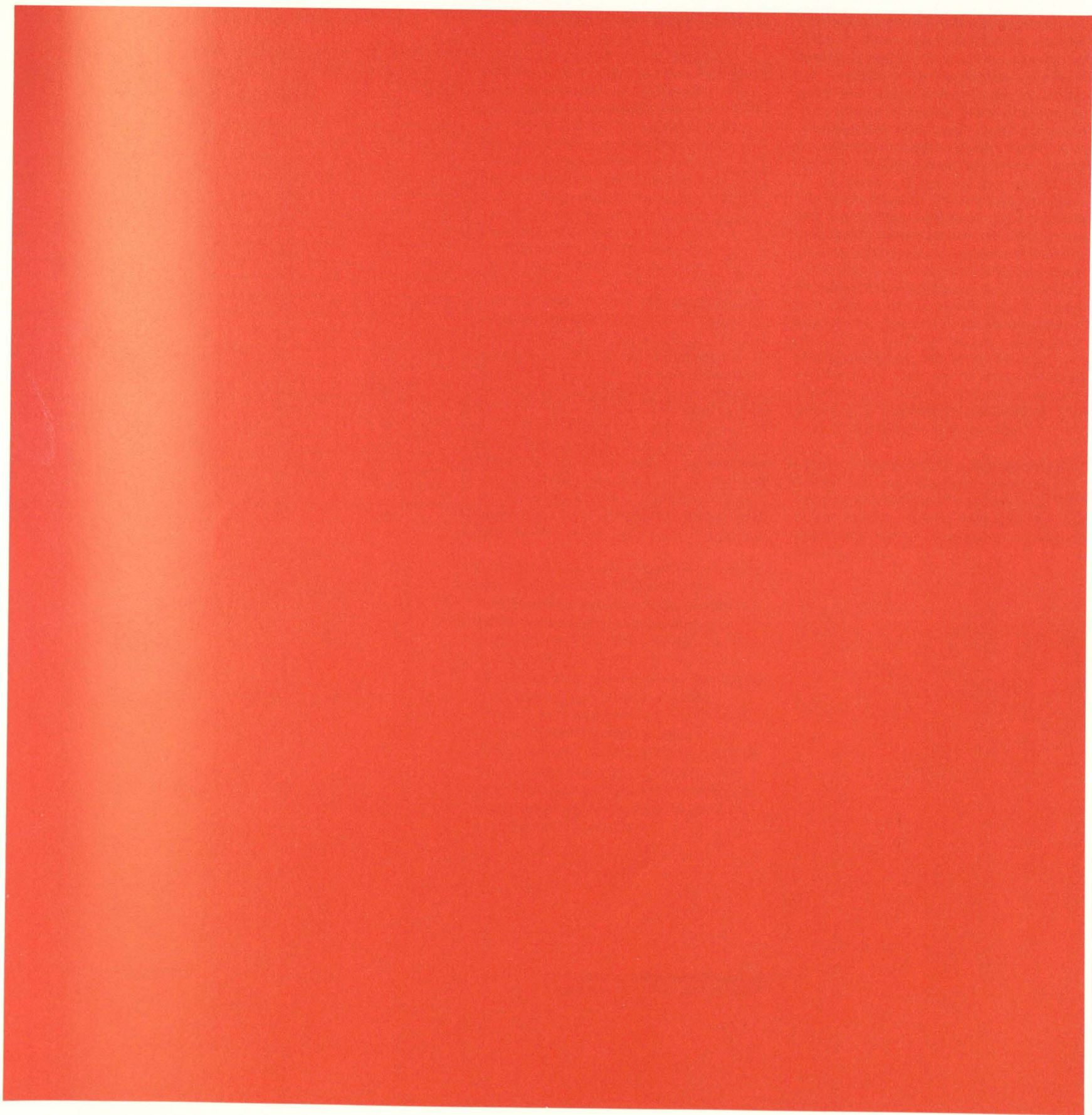
Utilities Serving the Area		219
	Area Development	222
The Water Resource		225
	Delivery Systems	228
	Industrial Water Consumption	231
	Plans for the Future	231
Research and Development		233
	Laboratories	235
	Professional Societies	237
	Computers	237
	State Assistance	237
Supporting Services		239
	Wholesale Trade	241
	Public Warehousing	243
	Private Warehousing	243
	Business Services	243
	Financial Services	245
	The World Trade Center: The Industrialist's Pathfinder to World Markets	246
Taxes on Business		249
Agencies Serving the Industrial Prospect		253
Appendix		273



The New York-  
New Jersey  
Metropolitan Area







## The Area's Industrial Leadership

The Metropolitan Area is the Nation's premier manufacturing center. Its primacy is evident whether measured in terms of employment, the number and variety of industrial plants, the value of production, or the level of capital expenditures for new plant and equipment. The highly diversified nature of manufacturing in the Metropolitan Area has been enhanced by the pattern of industrial investments. Over the last twenty years, these have exhibited strong growth and have been well distributed across the full spectrum of industrial activities.

### An Industrial Summary of the Metropolitan Area

Description	Metropolitan Area		New Jersey Sector		New York Sector	
	Number of Plants	Employees (000's)	Number of Plants	Employees (000's)	Number of Plants	Employees (000's)
Total*	45,353	1,664.4	11,728	640.9	33,625	1,023.5
Food	1,895	103.5	647	44.8	1,248	58.7
Tobacco	18	0.4	—	—	18	0.4
Textiles	1,856	60.9	496	23.2	1,360	37.7
Apparel	12,472	317.3	1,923	56.9	10,549	260.4
Lumber	720	9.7	220	3.1	500	6.6
Furniture	1,499	29.5	293	8.9	1,206	20.6
Paper	970	53.3	324	26.8	646	26.5
Printing	6,063	187.8	1,090	34.1	4,973	153.7
Chemicals	1,753	110.5	863	77.5	890	33.0
Petroleum	113	5.0	68	4.2	45	0.8
Rubber & Plastics	1,045	43.2	429	25.4	616	17.8
Leather	1,023	41.7	147	10.3	876	31.4
Glass	881	27.6	341	16.4	540	11.2
Primary Metals	593	42.8	300	29.1	293	13.7
Metal Fabricating	3,447	103.3	1,256	49.5	2,191	53.8
Machinery	3,505	95.9	1,634	56.0	1,871	39.9
Electrical Equipment	1,994	199.6	740	105.4	1,254	94.2
Transportation Equipment	424	84.8	153	28.4	271	56.4
Instruments	891	44.2	226	17.4	665	26.8
Miscellaneous	4,176	99.6	573	22.9	3,603	76.7
Ordinance	15	3.8	5	0.5	10	3.3
Central Administrative Units	1,060	179.0	260	55.1	800	123.9

\*Excludes Central Administrative Units.  
Totals may not add due to rounding.

The Largest Manufacturing Industries in the Metropolitan Area, 1967

SIC*	Description	Number of Plants	Employment
2335	Women's Dresses	2,691	76,100
3662	Radio & TV Transmitting Equipment	233	70,900
2337	Women's Suits and Coats	1,373	43,200
2721	Periodicals	635	36,700
3721	Aircraft	8	34,500
2711	Newspapers	362	34,100
3079	Plastics Products	894	32,800
2834	Pharmaceuticals	178	30,900
3679	Electronic Components	348	28,600
2751	Commercial Printing	1,878	26,700
	Sub-Total	8,600	414,500
	All Industries	45,353	1,664,400

The most striking characteristic of the Metropolitan Area's manufacturing complex is its diversity—of product, of process and of location. More than sheer magnitudes, it is this diversity that demonstrates the Area's industrial leadership. Of the 414 separate industries identified by the United States Census Bureau in its industrial lexicon, 394 are represented in the Area's eighteen counties. The extent of each industry's representation in terms of plants and employment is shown in the Appendix and is presented, in summary, in the accompanying table.

The presence of such a broad range of manufacturing activities in the Metropolitan Area is a valuable asset to the industrialist. It assures him of close sources of supply for components and materials, thus enabling him to assemble his products economically and to reduce his need for costly inventories and special equipment. To the industrialist whose products are sold to other manufacturers, the Area's diversity provides assurance that his immediate market will be of substantial proportions even for the most specialized of products.

Compared to the other leading industrial metropolitan areas of the Country, New York-Northeastern New Jersey exhibits much less dependence on a single industrial activity. Graph 1 shows the proportion of total manufacturing employment accounted for by the largest industrial category in each of the Nation's principal industrial metropolitan areas. The ten largest industrial categories in terms of employment, listed in the accompanying table, account for only 25 per cent of the Area's manufacturing employment and for 19 per cent of the industrial plants.

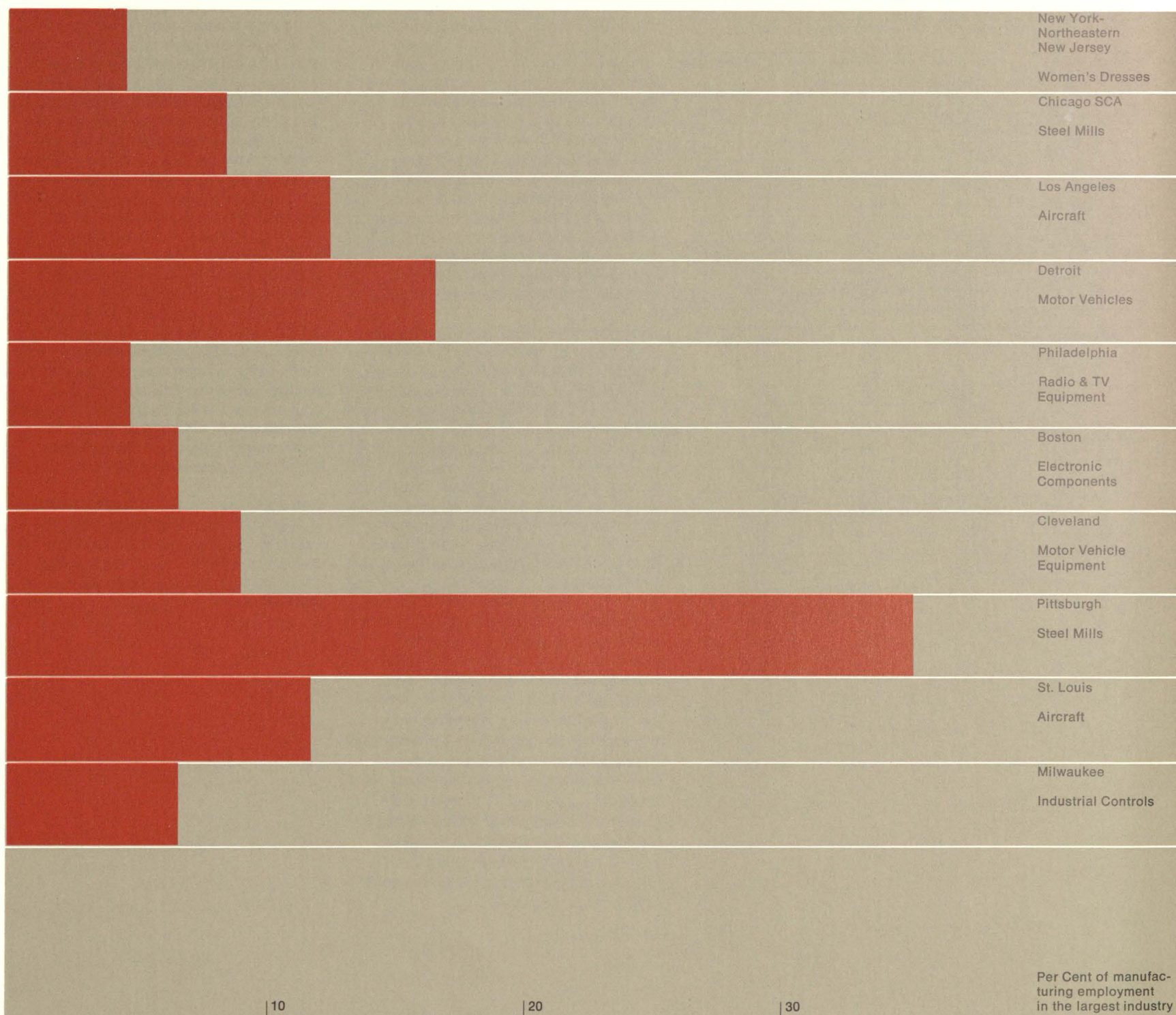
Following the ten leaders is a group of twenty-three types of industries, each providing employment to more than ten thousand workers. Included in this group are such activities as the production of motor vehicles, games and toys, aircraft parts, lighting fixtures, machinery, metal stampings, nonferrous wire, leather handbags, and toiletries.

The next grouping consists of 64 activities, each employing between five and ten thousand persons. Leading this group are the manufacturers of advertising displays, costume jewelry, dolls, photographic equipment, semi-conductors, special industry machines, printing machinery, dies and tools, sheet metal work, cans, rubber products, paints, and plastic materials. The production of organic chemicals, cyclic intermediates, bookbindings, corrugated boxes, automotive cloth trimmings, and confectionery products is also included.

Finally, there are 161 industrial activities in the Area, each employing between one and five thousand workers, and 136 industries whose Area-wide employment amounts to under one thousand workers each.

\*Standard Industrial Classification

Graph 1  
 Diversity: Relative Importance of the Largest  
 Industry in the Leading Industrial Areas, 1967\*



\*The term "Leading Industrial Areas" refers to Standard Metropolitan Statistical Areas, as defined by the United States Bureau of the Census. In the case of Chicago, the relevant economic envelope surrounding the city includes Gary, Indiana and is referred to as Standard Consolidated Area (SCA).

The largest industrial category in the New York-Northeastern New Jersey Area, Women's Dresses (SIC 2335), accounts for a smaller proportion of total manufacturing employment than the largest category of any other leading industrial area.

The Census of Manufactures reports that 1,664,400 people hold manufacturing jobs in the Metropolitan Area. This work force, which excludes the 179,000 employed in separate Central Administrative Offices of manufacturing firms, is composed of 1,218,300 production workers and 446,100 in-plant non-production workers (Graph 2; p. 18).

The Area's role as the Nation's corporate headquarters center has led many to believe that manufacturing employment here is composed mainly of Central Administrative Office jobs. On the contrary, the proportion of production workers is not basically different from the ratios exhibited by the other leading industrial centers (Graph 3; p. 19).

In the course of the last two decades, total manufacturing employment in the Metropolitan Area grew by the relatively small amount of 7 per cent. This small growth has been due to a fundamental restructuring of the Area's manufacturing complex during the period. In general, the trend that has emerged during the past twenty years has been one of good growth among the technology-oriented, high-wage industries, while employment in the low-wage industries has declined.

Principal among these changes has been the expansion of the durable goods sector where employment rose by 31.5 per cent. Durable goods production now absorbs almost 45 per cent of the Area's employment, in contrast to 36 per cent in 1949. The high-growth components have been electrical equipment, machinery, instruments, metal fabrication and transportation equipment (Graph 4; p. 20).

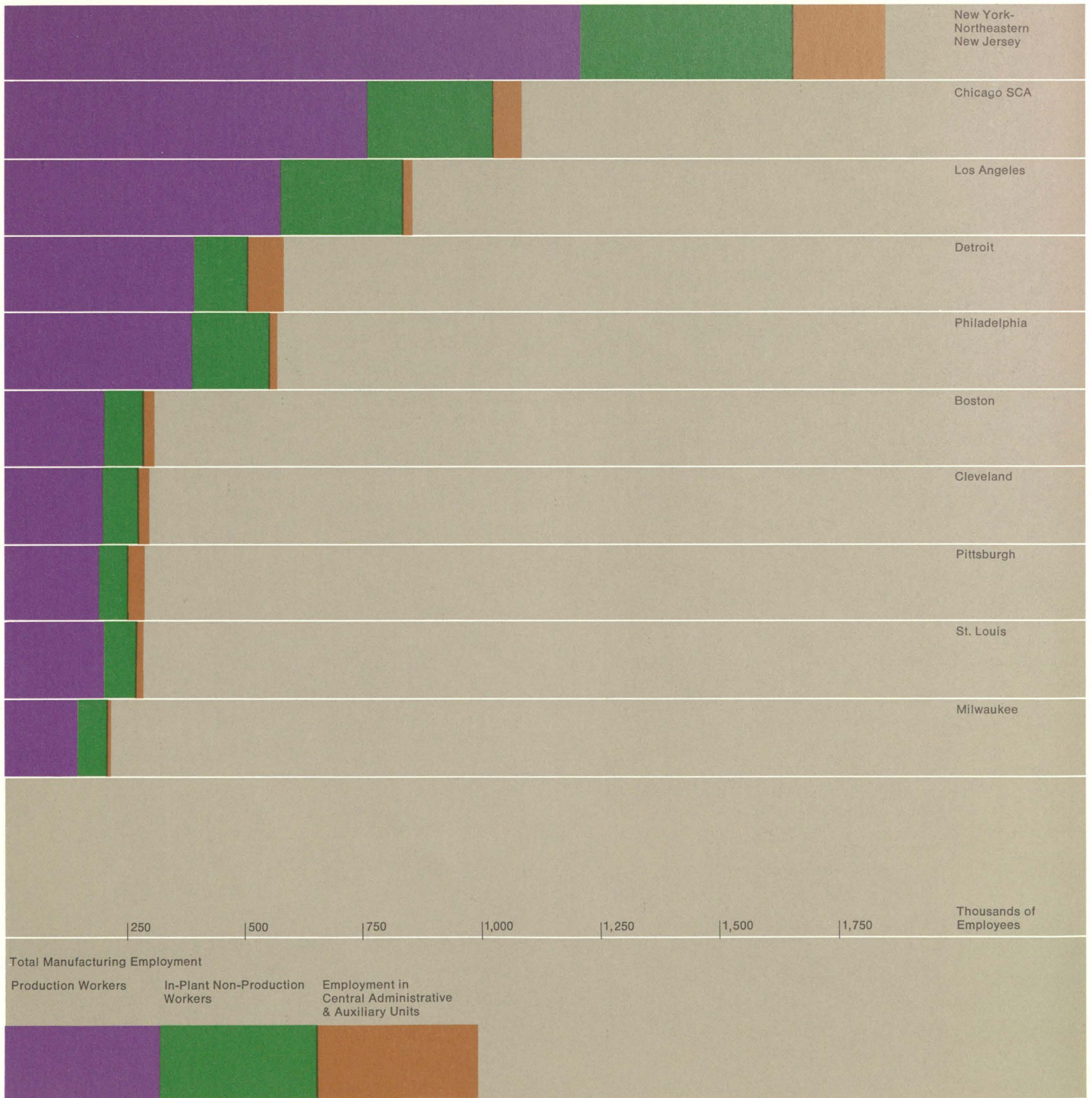
Employment in the nondurable sector declined 7 per cent, due principally to the persistent and continuing attrition in the apparel industry which declined by over 27 per cent. Excluding apparel, the long-term growth of the nondurable sector has been 6.3 per cent. Vigorous expansion has been exhibited in chemicals, rubber and plastics, paper products and printing.

Garment manufacturing in the Metropolitan Area, about half of which is located in Manhattan, has been particularly affected by the out-migration of manufacturers of standardized clothing items—uniforms, work clothes, underwear, hosiery—and of producers of the cheaper dress and outerwear lines. It is significant, however, that employment in those parts of the industry more attuned to fashion trends and higher value products—better dresses, coats, sportswear, accessories—has grown in this Area, probably because of the connection between those activities and Manhattan's strong design, advertising and merchandising complex.

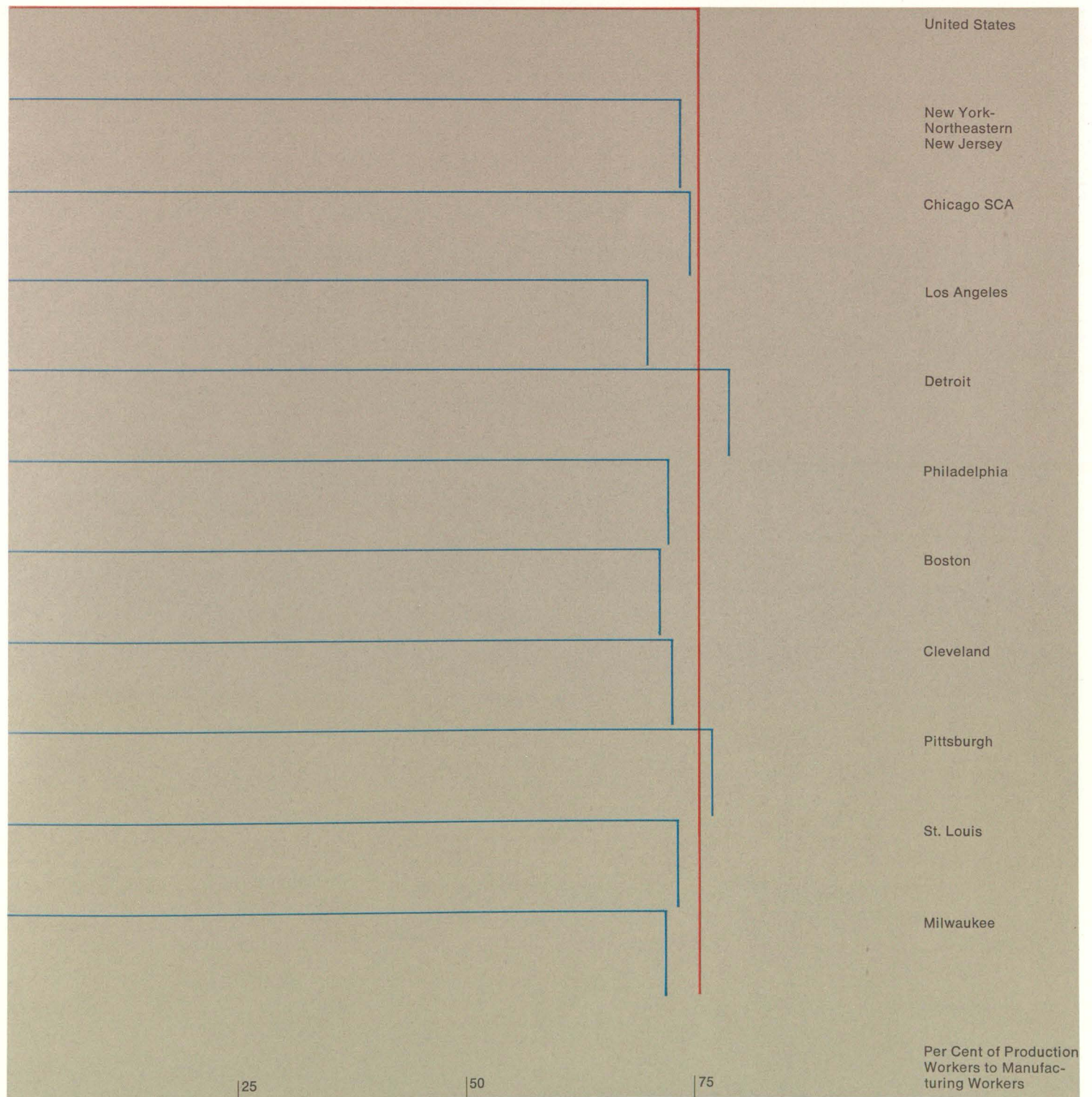
Excluding apparel, the rise in total manufacturing employment has been a vigorous 18.5 per cent or 232,100 jobs. Thus, apparel's decline has served to mask the dynamic elements of the Area's industrial structure.

The ability of the Metropolitan Area to withstand the impact of such a deep and fundamental restructuring of its industrial base reflects the basic health of its economy. This adjustment has not run its full course, and the thrust of the growth industries will make itself felt in the decade that lies ahead.

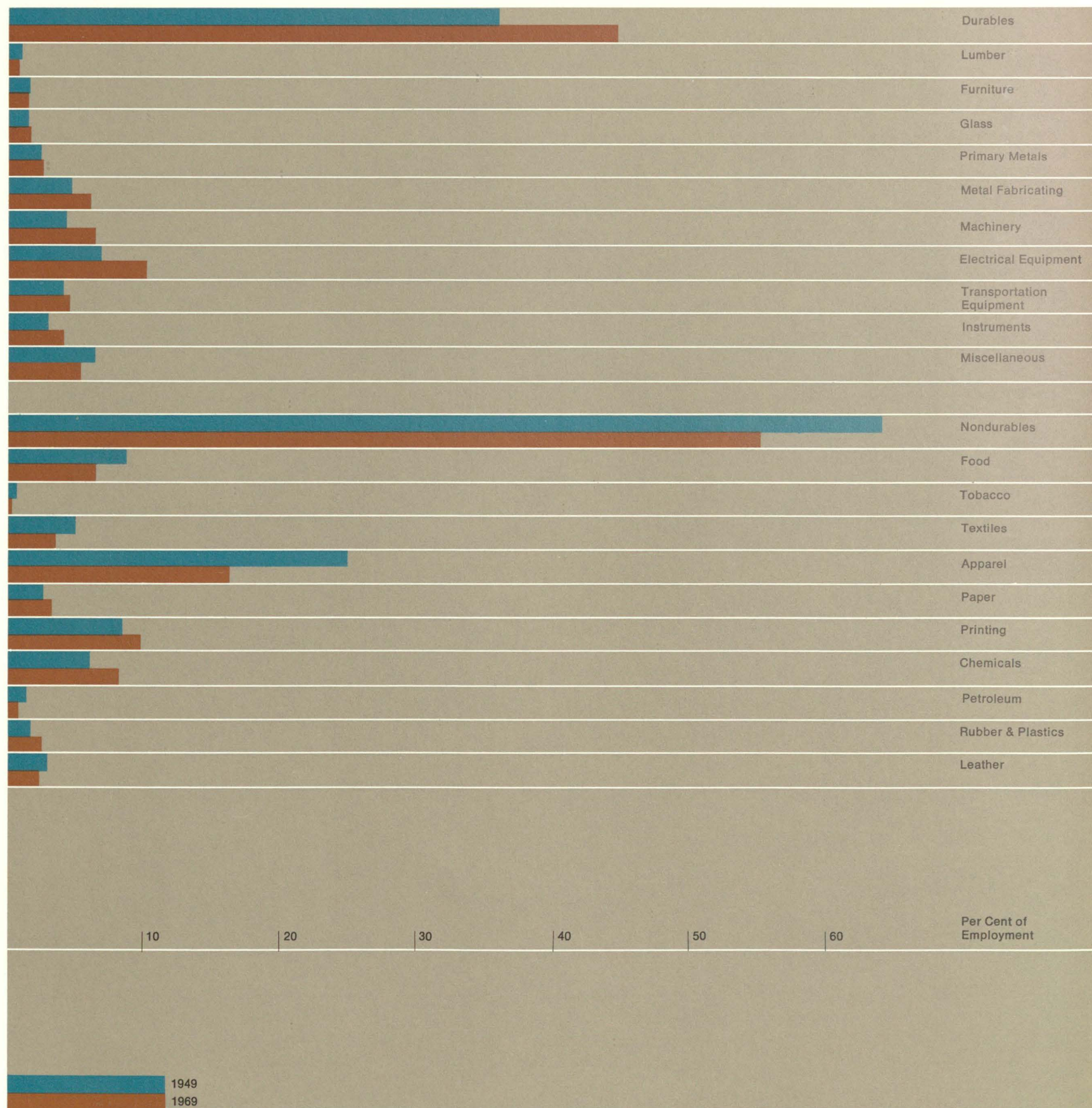
Graph 2  
 Manufacturing Employment in the Leading  
 Industrial Areas, 1967



Graph 3  
Ratio of Production Workers to Manufacturing  
Employment in the Leading Industrial Areas, 1967



Graph 4  
The Changing Composition of Manufacturing  
in the Metropolitan Area



Size and Type of Industrial Plants in the Area, 1967

Industry	Number of Establishments in Each Employment Size Class			
	1-19	20-99	100-249	250 & Over
Food	1,172	493	143	87
Tobacco	15	2	—	1
Textiles	1,028	702	102	24
Apparel	7,493	4,532	385	62
Lumber	579	130	11	—
Furniture	1,147	317	26	9
Paper	488	331	116	35
Printing	4,721	1,066	170	106
Chemicals	1,109	443	117	84
Petroleum	68	35	6	4
Rubber & Plastics	585	368	67	25
Leather	586	315	101	21
Glass	616	209	38	18
Primary Metals	313	177	61	42
Metal Fabricating	2,350	875	168	54
Machinery	2,722	626	96	61
Electrical Equipment	1,080	580	173	161
Transportation Equipment	241	107	40	36
Instruments	592	206	61	32
Miscellaneous	3,048	939	145	44
Ordnance	4	6	—	5
Administrative Units	355	364	165	176

Proportion of Small Plants

	Per Cent
New York-Northeastern New Jersey	66
United States	65
Los Angeles	67
Chicago SCA	60
Philadelphia	59
Detroit	64
Boston	63
San Francisco	70
Cleveland	61
St. Louis	58
Providence	65

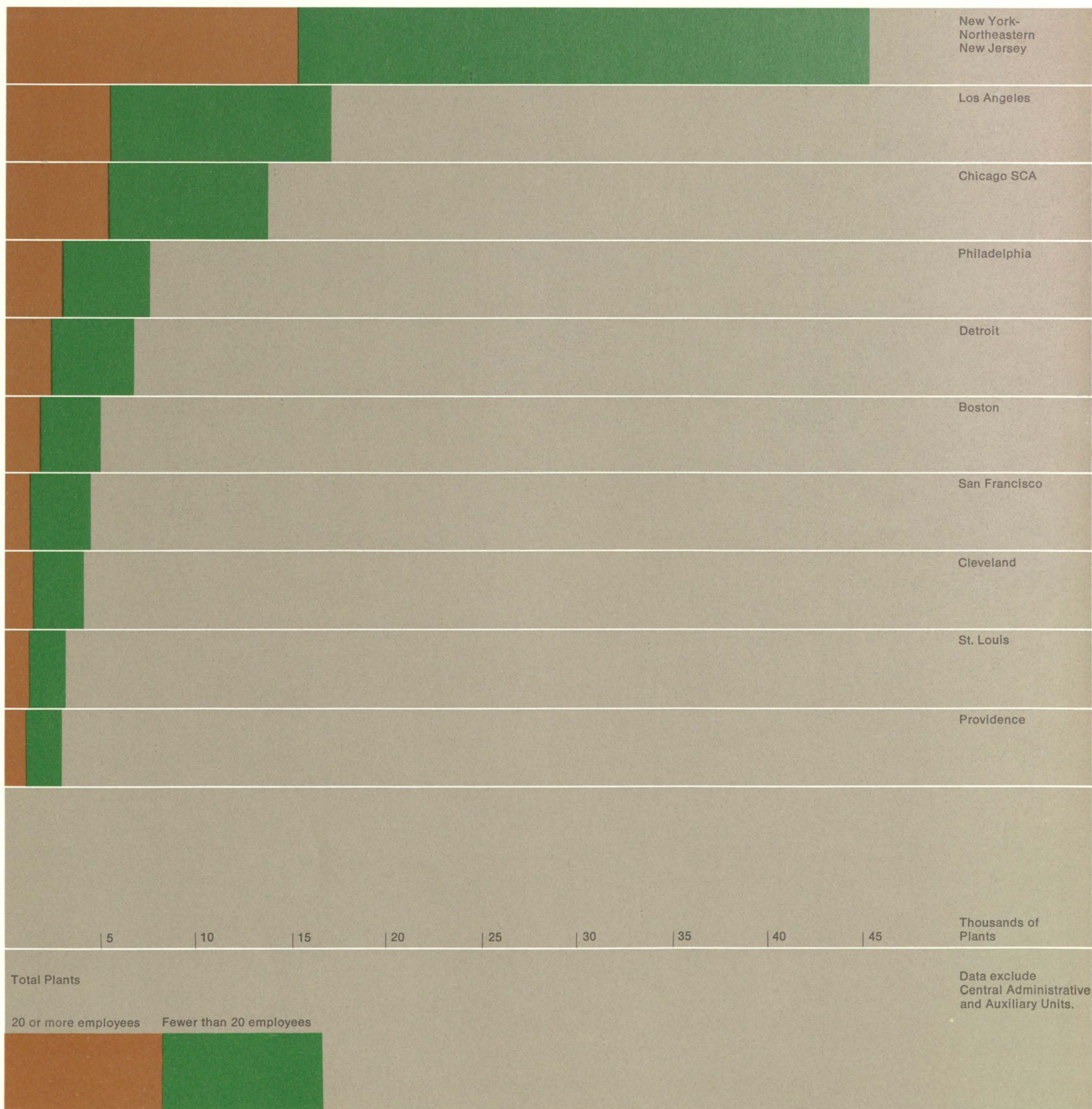
The diversified nature of manufacturing in this Area is further reflected in the number of plants located here. In 1967, there were 45,353 manufacturing plants and 1,060 Central Administrative Offices. The number of plants is equivalent to 15 per cent of the total in the United States and is as great as the combined number in Metropolitan Los Angeles, Chicago, Detroit and Philadelphia, the second- through fifth-place American industrial centers (Graph 5; p. 22).

Industry in the bi-state Area has long been regarded as being composed mainly of small establishments. This characterization is not entirely accurate. While it is true that there are a great number of small industrial operations—29,957 of them employ less than twenty persons—they do not represent a significantly different proportion of the total here than in the other major industrial centers.

In addition to the 29,957 small manufacturing establishments, there are 12,459 plants employing 20 to 99 persons, 2,026 employing 100 to 249, and 911 employing 250 or more. No plant accounts for more than 2 per cent of the Metropolitan Area's manufacturing employment. The accompanying table presents some details of the plant-size composition of manufacturing in the eighteen-county Area.

Small-scale manufacturing is rather concentrated in Manhattan, where 42 per cent of the Area's small plants are located. In the remaining 17 counties, the average industrial establishment is larger than the average establishment found in the other leading centers. Excluding Manhattan's 17,286 plants from the Area-wide total, the remainder—28,067 plants—still exceeds, by a large margin, the gross number found in any other metropolitan area.

Graph 5  
 Number of Manufacturing Plants in  
 the Leading Industrial Areas, 1967



The Metropolitan Area's industrial output, as measured by the value of shipments from its manufacturing plants, amounted to \$48.2 billion in 1967, according to the most recent Census information. Of this amount, \$24.0 billion represents the value added\* within the Region. The other \$24.2 billion represents the cost of material inputs.

Industrial production has exhibited vigorous growth for the last decade. Graph 6 (p. 24) depicts the extent of this growth since 1960 (including estimates for 1968-1970). The value of industrial shipments increased 31 per cent between 1960 and 1967 and is estimated to have increased by an additional 16 per cent in the last three years. Equally noteworthy are the increases registered by the components of industrial shipments: value added and cost of materials. Value added in 1967 was 38 per cent higher than in 1960 and is estimated to have reached \$27.7 billion in 1970. Cost of materials in 1967 amounted to \$24.2 billion, or 25 per cent above the 1960 level. In view of the trends evidenced here, it is estimated to have reached \$28 billion in 1970.

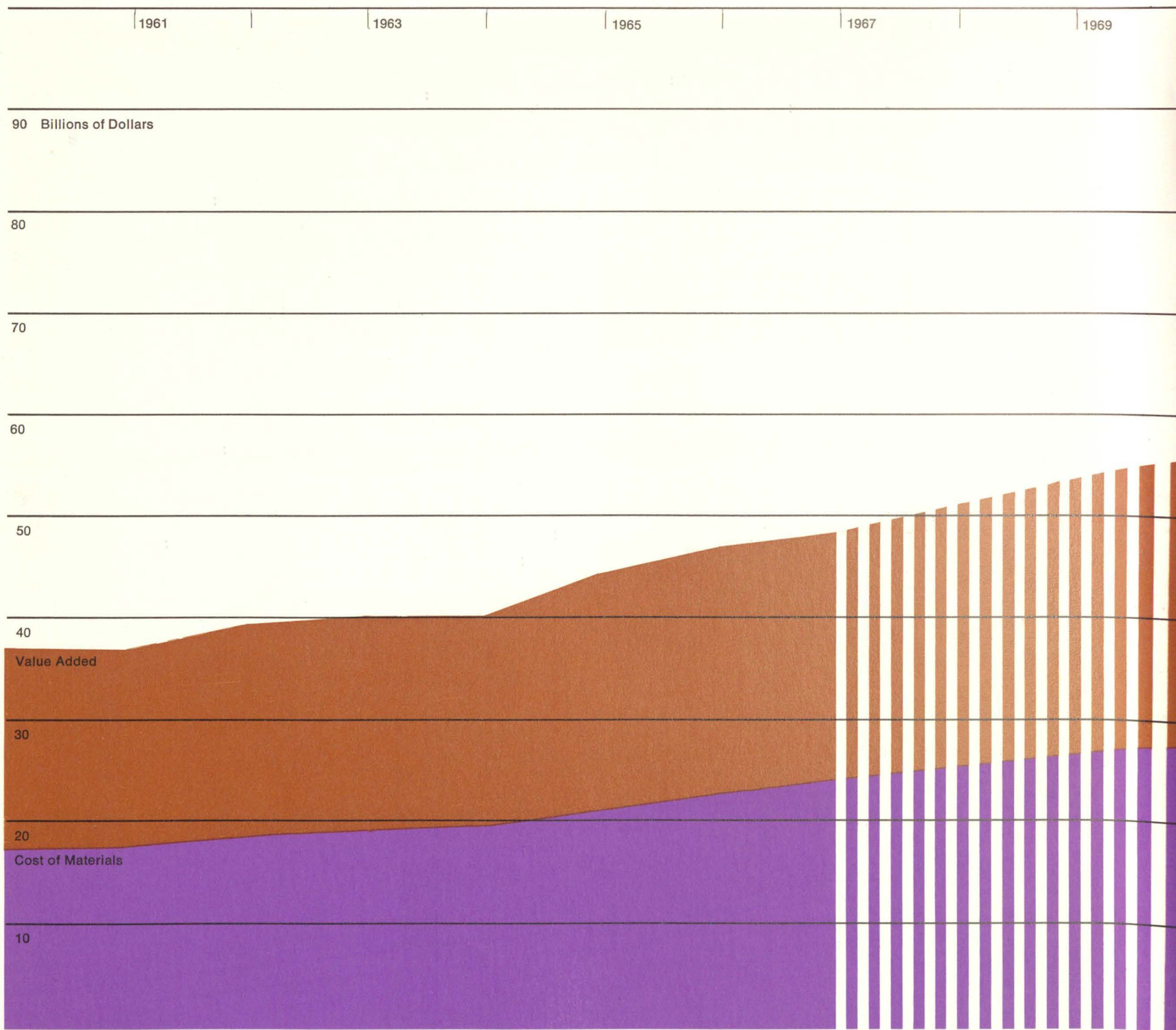
The Area's value of production is fairly evenly distributed among the various industrial categories (Graph 7; p. 25). The largest category, apparel, accounts for less than 16 per cent of shipments and for 13 per cent of value added. Its current importance is much diminished from the early post-war period when it accounted for almost 22 per cent of the Area's total value added of manufacturing and for more than a quarter of shipments.

After apparel, the leading industries are chemicals, printing and food production, each with about 11 per cent of total shipments.

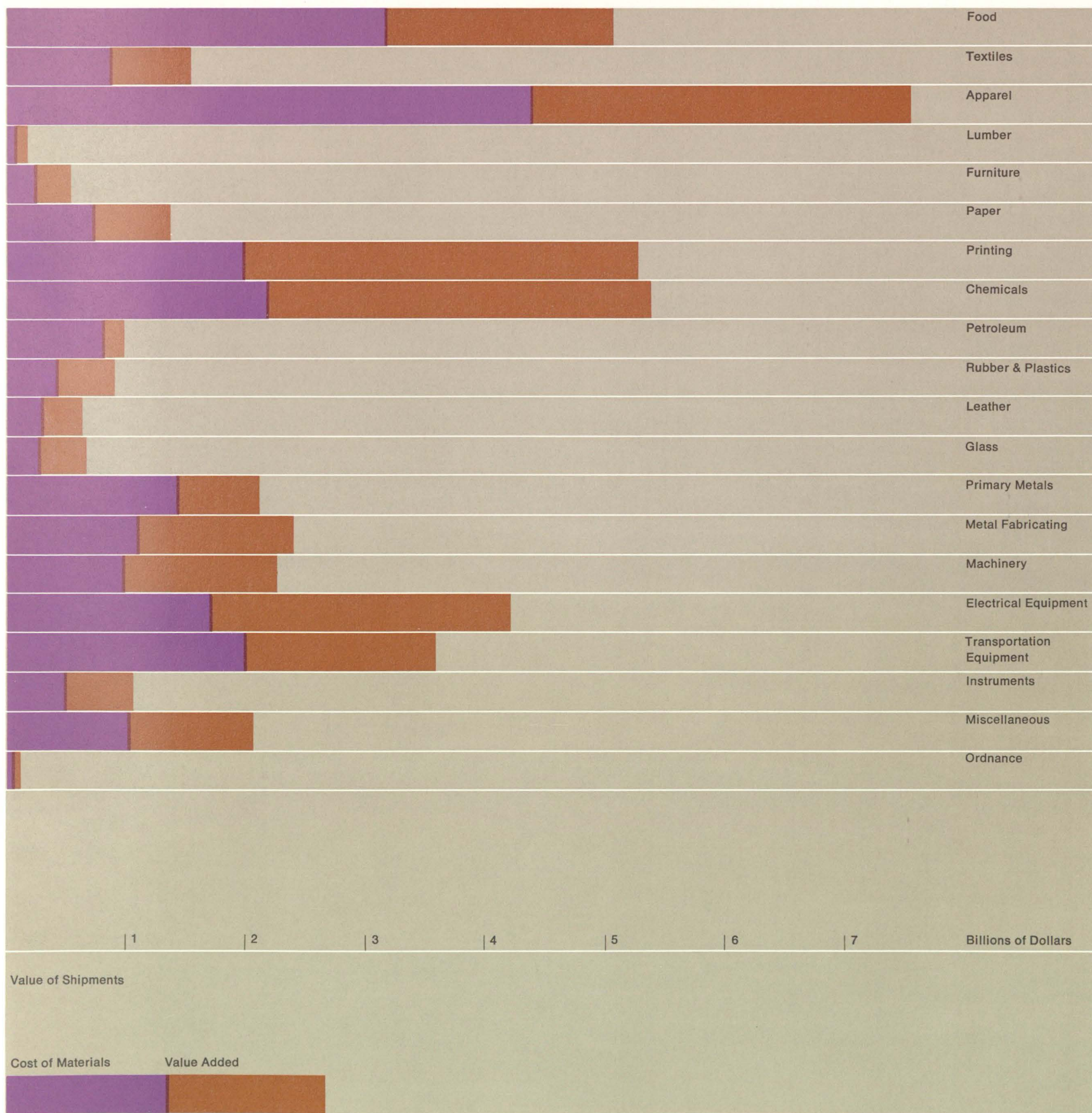
Manufacturing in this Metropolitan Area is sometimes characterized as being heavily weighted by low-value operations, where purchased material inputs represent most of the value of the finished product and where the value added is minimal. The relationship between value added and cost of materials, each of which accounts for half of the value of shipments in this Area, is shown in Graph 8 (p. 26) which also reveals that the nature of industrial production here is not radically different from that in other industrial areas. In fact, low-value operations appear to play a somewhat larger role in Chicago, Detroit, St. Louis and Pittsburgh.

\*Value added, as defined by the Bureau of the Census, refers to the difference between the value of shipments (f.o.b. plant) and cost of materials (including materials, supplies, fuel, electric energy, cost of resales, and miscellaneous receipts). Value added is thus a measure of the net addition of services and is considered to be the best value measure now available for comparing the relative economic importance of manufacturing among industries and geographic areas.

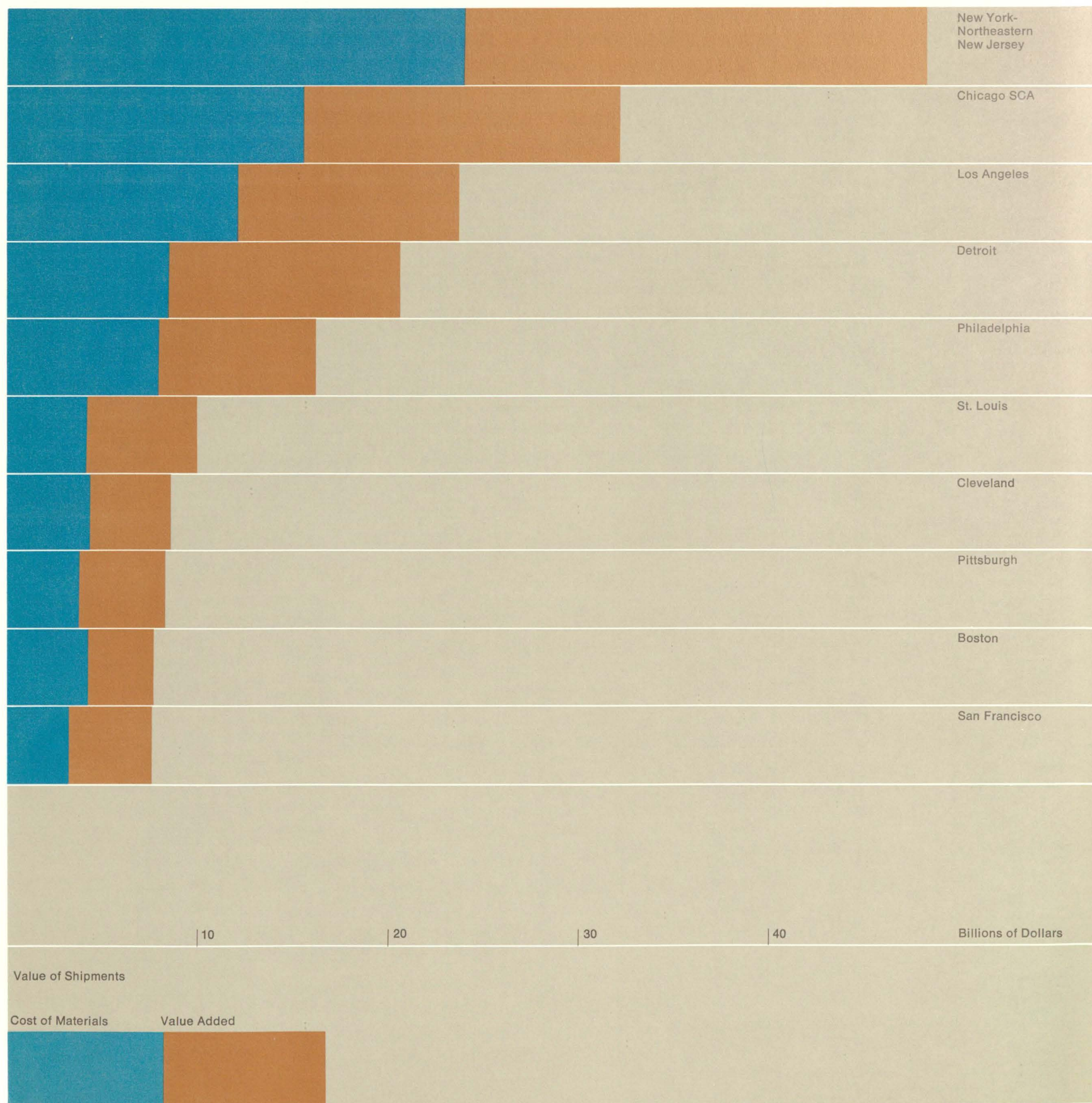
Graph 6  
The Area's Industrial Production



Graph 7  
Production by Type of Industry in the Area, 1967



Graph 8  
 Industrial Production in the Leading Industrial  
 Areas, 1967

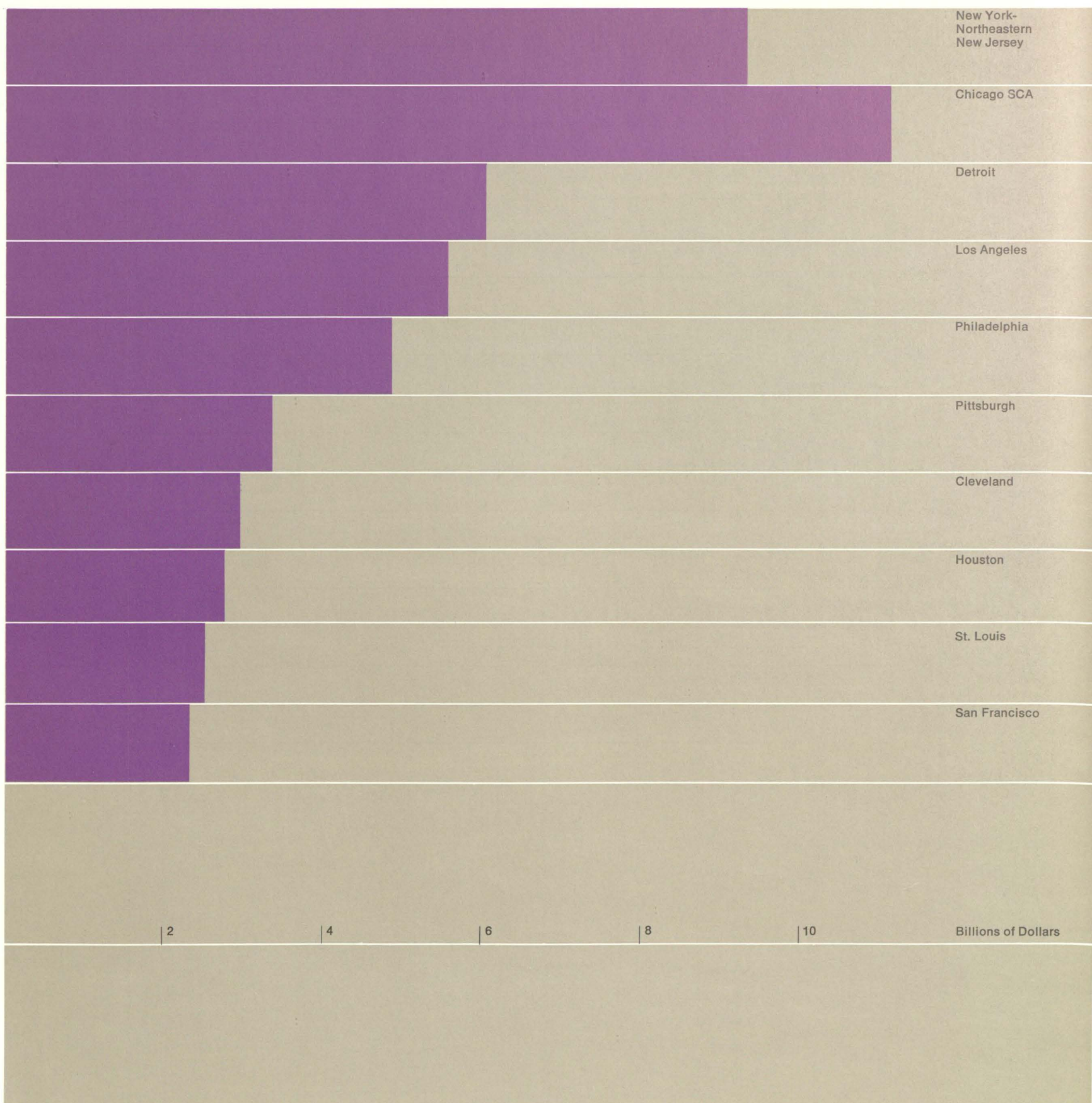


The Metropolitan Area continues to attract large-scale annual investment for new plants by all kinds of manufacturers. From the end of the Korean War to 1967, the amount of capital invested for new plant and equipment in this Area amounted to \$9.4 billion, exceeded only by Chicago's \$11.2 billion (Graph 9; p. 28).

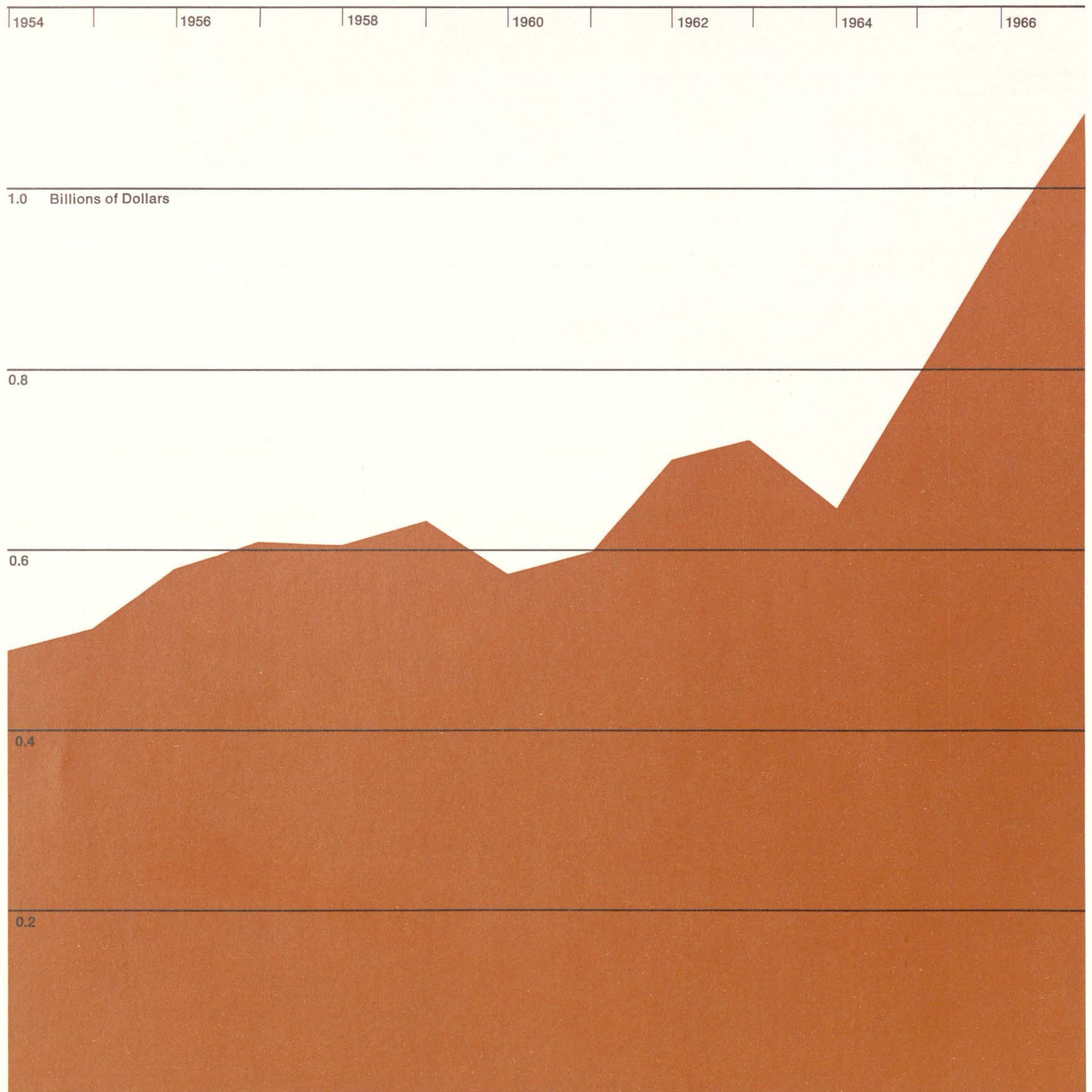
This cumulative investment reflects the basic confidence of the industrial community in the Area's economy. This degree of faith has not diminished with the passage of time, as witnessed by the continuous growth, on an annual basis, of investment volumes. According to the 1967 Census of Manufactures, expenditures for new plant and equipment reached a peak of \$1.1 billion in 1967, an increase of 16 per cent from the \$949 million invested here during 1966, the second highest year (Graph 10; p. 29).

While new plant and equipment spending in the Metropolitan Area is surpassed by investments in the Chicago-Northwest Indiana Standard Consolidated Area (where producers invested some \$1.3 billion in 1967 alone), the distribution of investments among the various industry groups here shows a greater diversification compared with Chicago, where over a third of the 1954-1967 cumulative investment went into primary metals. In the New York-Northeastern New Jersey Metropolitan Area, no one industry accounted for more than 17 per cent of the cumulative investments made during the same period (Graph 11; p. 30).

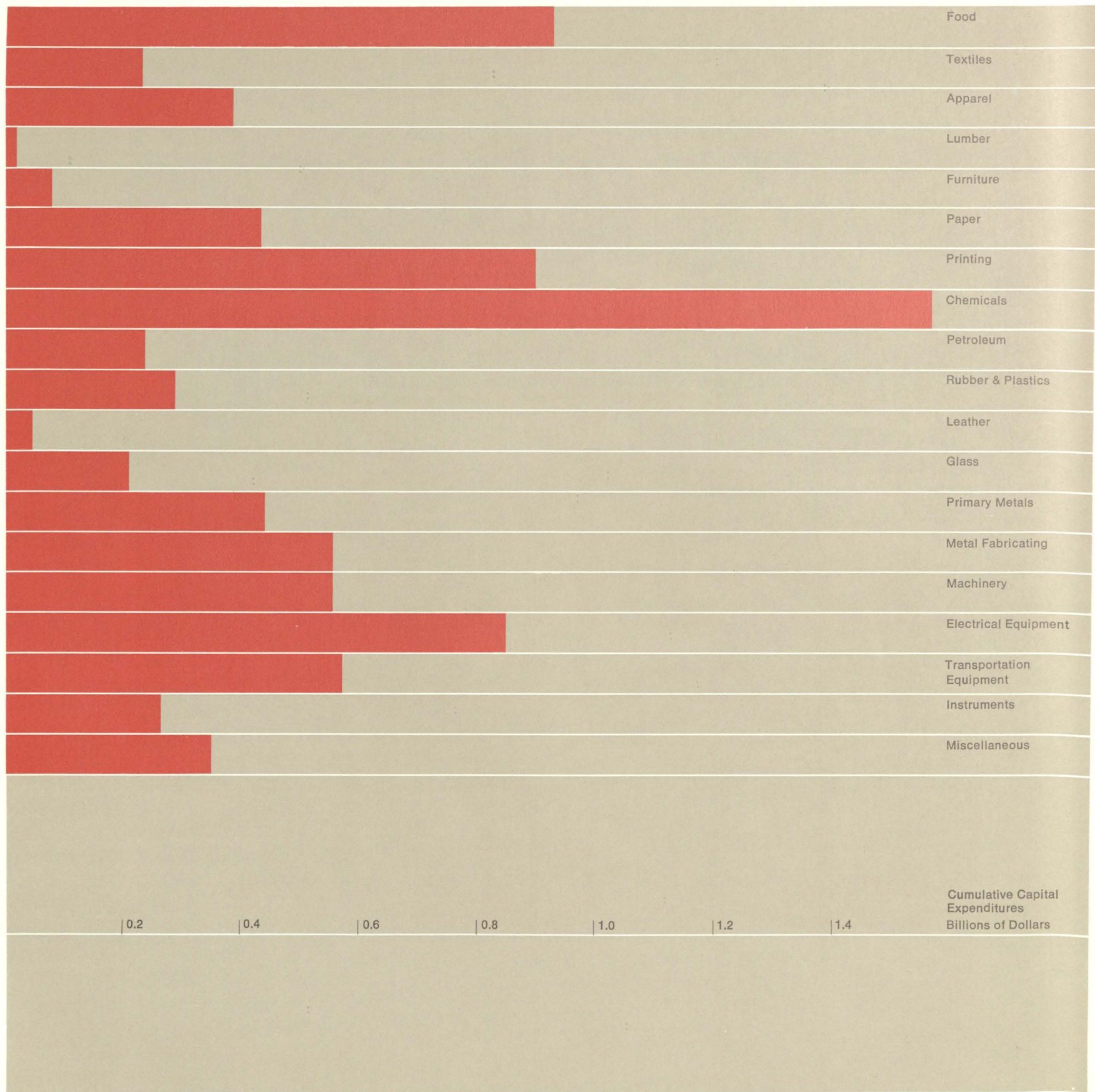
Graph 9  
 Cumulative Capital Investment in the Leading  
 Industrial Areas, 1954-1967  
 For Manufacturing Plant and Equipment



Graph 10  
Annual Manufacturing Investment in the  
Metropolitan Area, 1954-1967



Graph 11  
 Cumulative Investment by Type of Industry in the  
 Metropolitan Area, 1954-1967



The New York-Northeastern New Jersey Metropolitan Area is a locale where the industrialist gets full value for his labor dollar. A reliable measure is the average value added by one dollar of manufacturing labor in each of the leading industrial centers and in the United States as a whole. More specifically, the measure refers to value added per dollar of manufacturing payroll costs—which represents all moneys actually paid, including vacation, sick leave, overtime pay, as well as compensation in kind (Graph 12; p. 32).

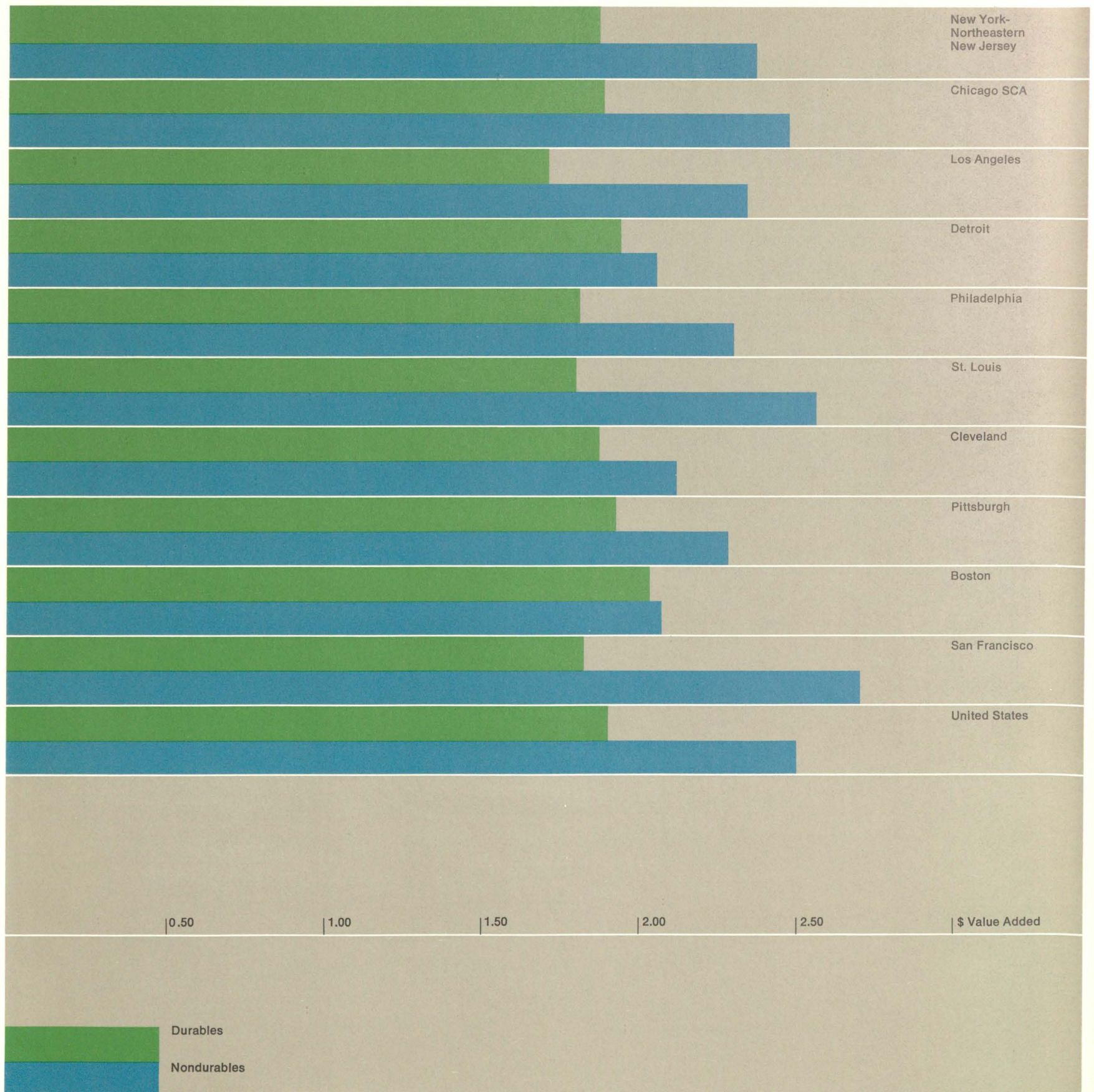
In durable goods, output per labor dollar in this Area averaged \$1.90 in 1967, compared to the slightly higher national average of \$1.92. Among the principal industrial centers, higher unit levels of output were compiled in Detroit (\$1.96), Pittsburgh (\$1.95), Boston (\$2.05), and Providence (\$1.99). On the other hand, output levels were higher here than in Los Angeles (\$1.72), Philadelphia (\$1.82), Cleveland (\$1.89), St. Louis (\$1.81), and San Francisco (\$1.84), while they were the same as Chicago's.

In the production of nondurable goods, value added per dollar of labor in the Area amounted to \$2.40 in 1967 compared to an average of \$2.52 for the Nation. Only Chicago, St. Louis and San Francisco recorded higher unit levels of output. The other major centers were all lower than the Metropolitan Area.

The industries in which the Metropolitan Area's unit output levels were higher than the composite ratio of the other principal American cities in 1967 were apparel, furniture, printing, chemicals, petroleum refining, rubber and plastics, primary metals, machinery and transportation equipment.

In the production of food, lumber, leather, metal fabricating, electrical equipment and miscellaneous manufactures, the Metropolitan Area's output levels corresponded to the composite average of the other leading Industrial Areas. In the remaining three industries—paper, glass and instruments—output per labor dollar was below the composite average of the nine other leading Industrial Metropolitan Areas.

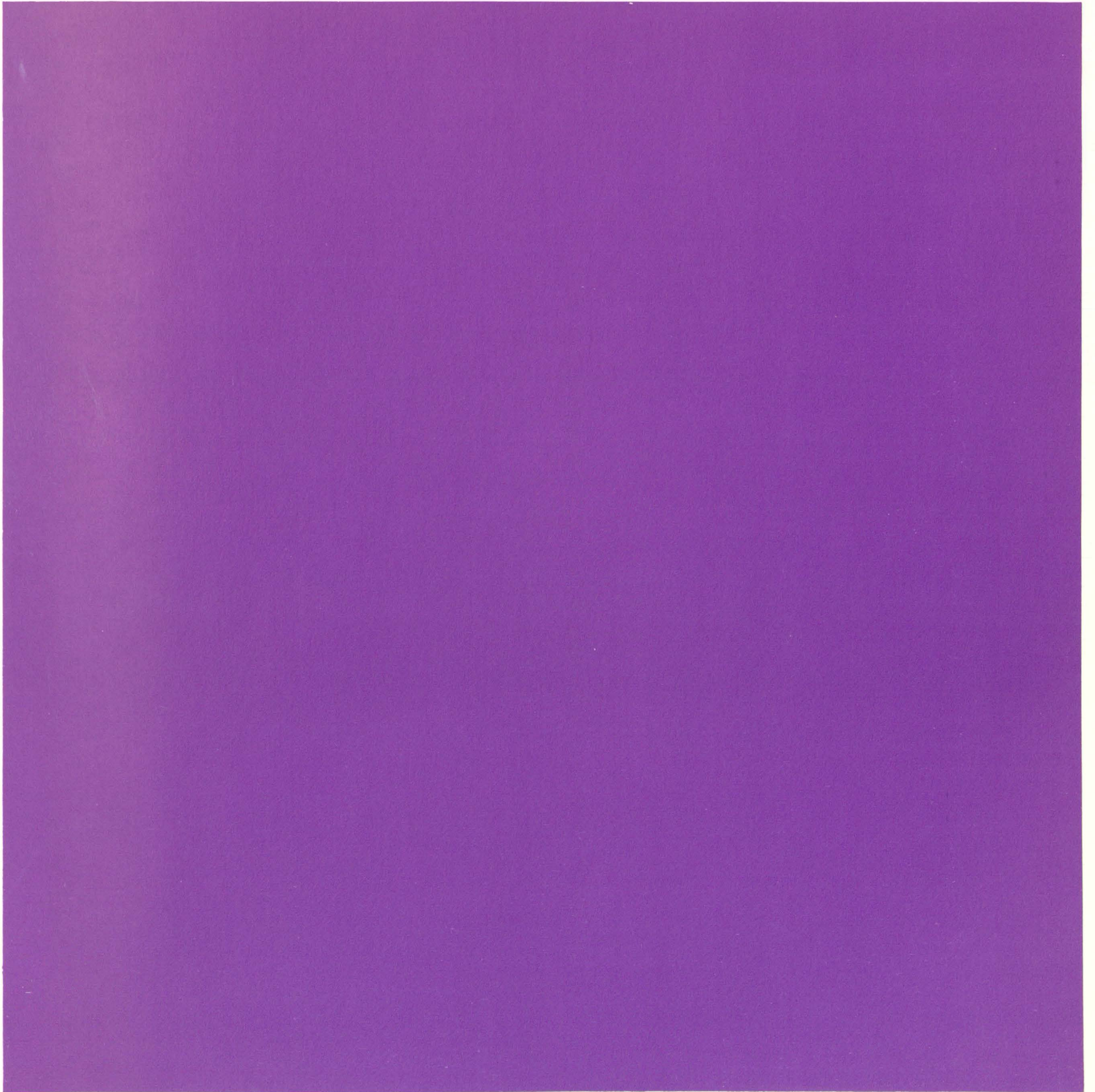
Graph 12  
Value Added Per Dollar of Wage in Manufac-  
turing, 1967



Value Added Per Dollar of Wage in  
Manufacturing, 1967

Industry	Value Added Per Dollar of Wage	
	New York-Northeastern New Jersey	Composite of the Nine Other Leading Industrial Areas
Food	\$2.60	\$2.62
Textiles	1.88	1.92
Apparel	1.99	1.85
Lumber	1.79	1.80
Furniture	1.81	1.78
Paper	1.88	2.01
Printing	2.27	1.92
Chemicals	3.76	3.30
Petroleum	3.98	3.58
Rubber & Plastics	1.97	1.93
Leather	1.76	1.74
Glass	1.93	2.05
Primary Metal	2.13	1.97
Metal Fabricating	1.85	1.87
Machinery	1.89	1.84
Electrical Equipment	1.78	1.80
Transportation Equipment	2.13	1.87
Instruments	1.87	2.13
Miscellaneous	1.95	1.93
Ordnance	1.98	1.54





## The Area's Economy

It is customary to think of the New York-Northeastern New Jersey Metropolitan Area as a financial center, as a hub of foreign trade, as the capital of corporate headquarters, as a commercial center, as a transportation crossroads, as a market for culture and fashion, as a scientific and research center, and as a home base of the mass communications media. In each of these fields, the Area performs services far in excess of its own local needs.

The diversification found in the Area's manufacturing complex is also evident in the entire economy. Thus, cyclical fluctuations have a much milder impact here than in areas with narrower economic structures.

## The Role of Trade

Trade has always been the central factor of the Metropolitan Area's economy. In Colonial days, the initiative and commercial acumen of the merchant community made the most of the geographical and physical advantages of the port and laid the groundwork for the Area's leadership among American and European cities. Trading in the simple products of a Colonial economy was followed by the assembly and fabrication of raw materials. As the Nation's economy matured, the financing of trade led to the Area's dominance in the Country's financial activities. A vast complex of business services, brokerage, trade promotion and management activities came into being.

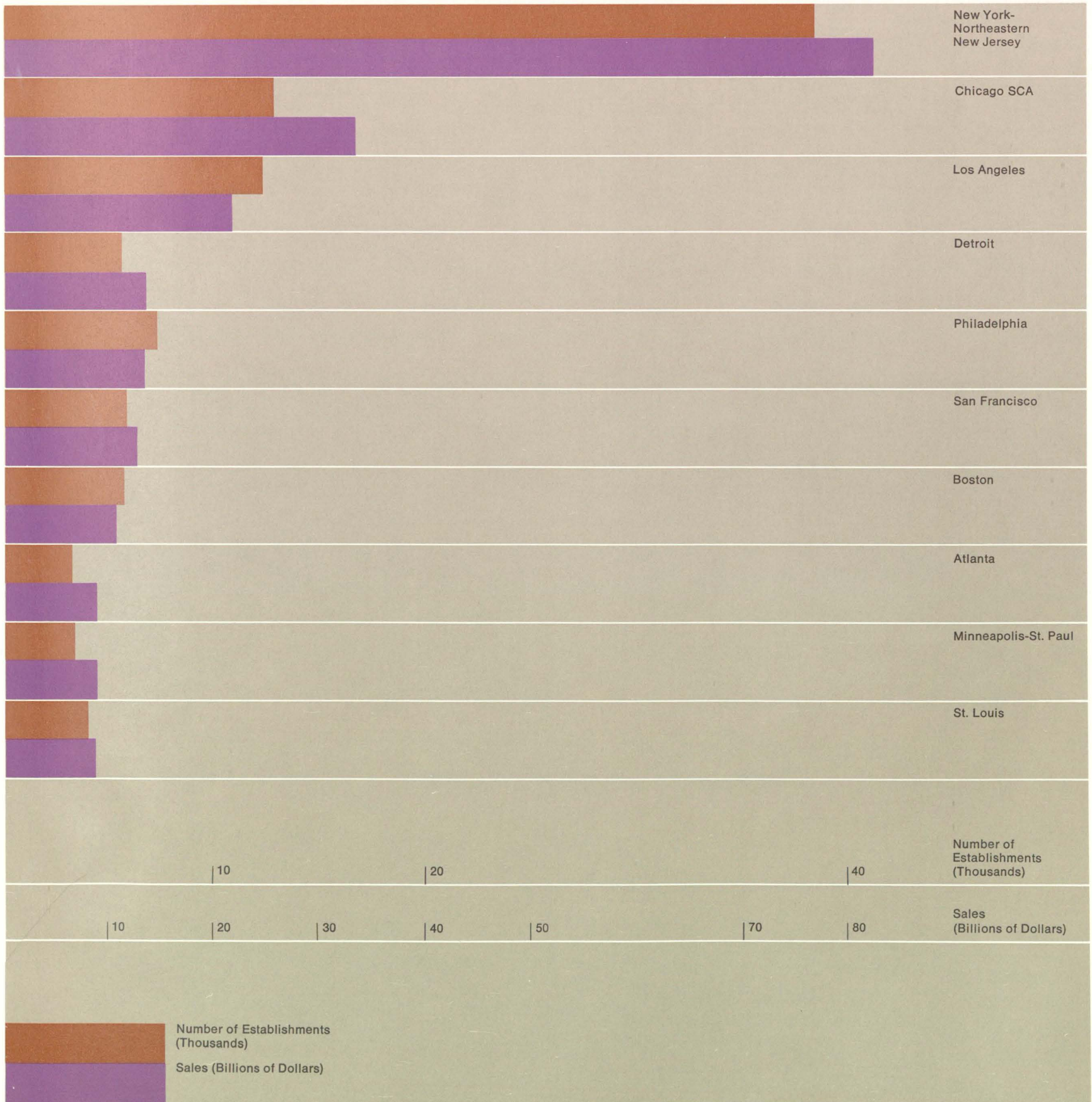
Today, wholesale trade is second only to manufacturing in importance to the economic base of the Metropolitan Area. Its importance derives not only from the employment it affords and its contribution to the Area's income, but also from its linkages with other categories of economic activity: manufacturing, warehousing, finance, brokerage and insurance.

In 1967, the Area's 38,340 wholesaling establishments rang up sales of \$82.1 billion, employed 476,000 persons and maintained inventories estimated at \$4.6 billion. This sector of the Area's economy continues to exhibit dynamic growth; its dollar volume has almost doubled since 1948, when sales amounted to \$42 billion, and employment was 378,000.

The volume of wholesale trade conducted here in 1967 represented 18 per cent of the national total and was as large as the combined totals of Chicago, Los Angeles, Detroit and Philadelphia, the four largest trade centers after this Area (Graph 13; p. 37).

Such a volume of trade far exceeds the local requirements of the Area's retailers and manufacturers. In fact, between a third and a half of the Area's wholesaling transactions are generated in dealings with markets lying beyond the confines of the Metropolitan Area. In foreign trade alone, Area-based wholesalers transacted business estimated at \$18 billion in 1967.

Graph 13  
Wholesale Trade in the Leading Metropolitan  
Areas, 1967





To some extent, the Metropolitan Area's economic leadership is the result of its geographic location with respect to the principal national and world concentrations of population, purchasing power and economic activity.

The Area is the foremost urban complex in the North Atlantic Core Region—a very large region that extends from the Mississippi River across the Atlantic and includes all of Western Europe (see map on opposite page). This Region is the core of world economic and political power because it contains the preponderance of the world's urban population, industrial activity, trade and consumption. In population, the bi-state Area is about twice as large as Greater London, the second largest city in the North Atlantic Core Region.

On the American continent, the bi-state Metropolis is simultaneously situated on two principal axes of urbanization, industry and population. First, it is located about midway between the two ends of a continuum of cities and metropolitan areas extending from Boston to Washington. This area is the supercity that French author Jean Gottmann has termed Megalopolis. The second of the two main North American urban and transportation axes is an east-west alignment with its poles at New York and Chicago.

The Boston-Washington continuum has long been recognized by industry in its search for markets and is a major element of the Metropolitan Area's post-war industrial growth. The New York-Chicago belt, while much longer than the Boston-Washington axis, also contains a large number of nearly contiguous metropolitan areas. This is the American manufacturing and urban belt and includes over half the population and productive capacity of the Country.

The Area's rise to economic pre-eminence cannot be attributed solely to geographic good fortune. Other cities on the North Atlantic coast enjoy equally good natural locations. Rather, the Area owes its status as a world metropolis to the readiness of its citizens to undertake heavy and prolonged investments to amplify the advantages of good natural location.

This willingness to invest heavily to provide superior linkages to distant markets—domestic and foreign—has produced the vast and intricate network of transportation and communications services that epitomize the shape of the Metropolitan Area of today. The advantages of canal transportation were seized upon to open the exchange of goods with the Midwest. With equal energy, investors plunged into the development of the national rail transport system radiating from New Jersey shores. Later, a great arterial highway network made this Area the hub of a highway system reaching into every state of the Union.

The Area's air age began before World War II. Comprehensive air service, supported by three major airports, has contributed to the centralization here of much of American management, financing, industry and insurance activities.

More recently, the bi-state Area has led the way in the development of containerization in maritime commerce. Its leadership in transportation has established the Metropolitan Area as the Nation's financial, corporate, industrial and commercial headquarters, supporting a population of 16 million people, with 7.5 million jobs, and aggregate personal income of over \$80 billion.

Graph 14  
Distribution of Population

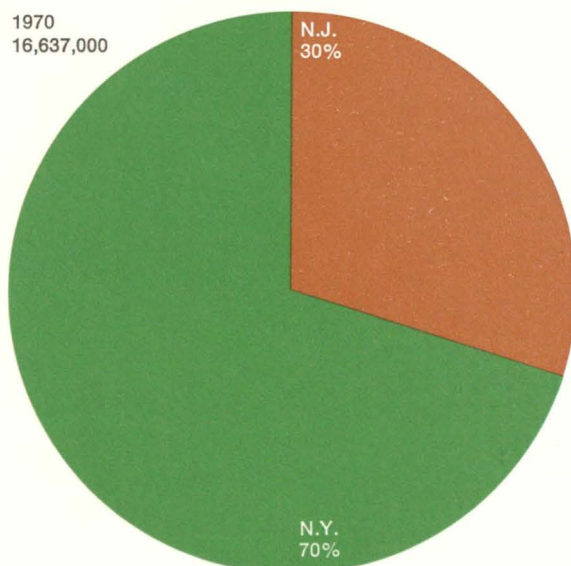
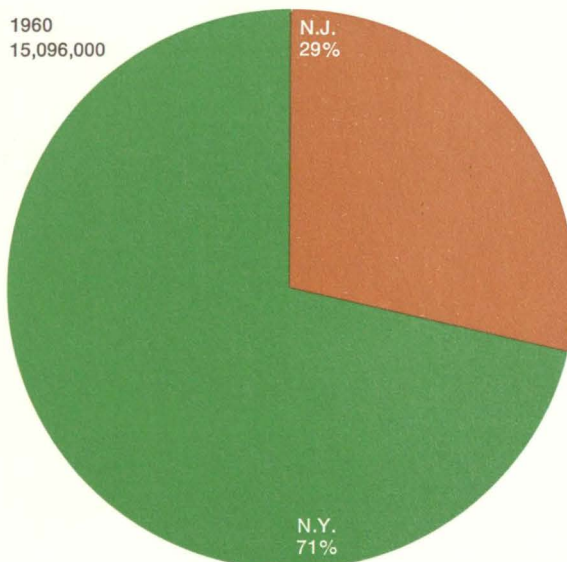
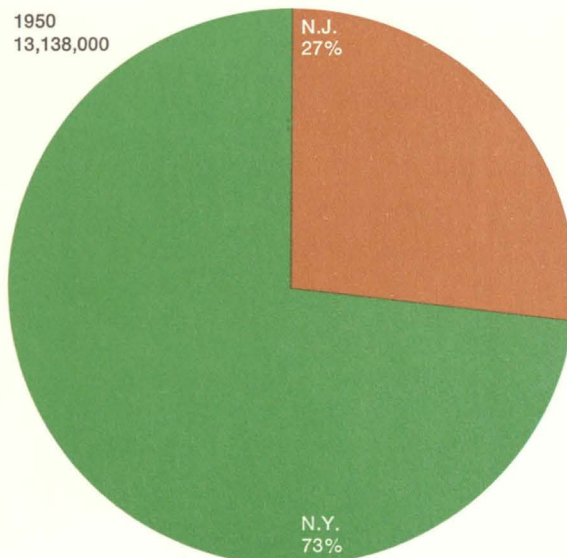
Population in the 18-County Area grew by 1,958,000 persons between 1950 and 1960, or 14.9 per cent, and by an additional 1,541,000 persons, or 10.2 per cent in the 1960's. For the twenty-year period, population growth amounted to 26.6 per cent.

Historical Population Growth  
1950-1970 (in thousands)

	1950	1960	1970
18-County Area	13,138	15,096	16,637
New Jersey Sector	3,581	4,401	5,065
New York Sector	9,557	10,695	11,572

Of the 16.6 million people living in the bi-state Metropolitan Area in 1970, 30 per cent occupy the New Jersey sector, while the remaining 70 per cent live in the New York sector. This relative share of population has changed only slightly since 1950.

Over the two decades, the New Jersey sector has experienced a higher population growth rate than the New York sector. Within the latter, the suburban counties of Nassau, Suffolk, Westchester and Rockland have registered rapid growth. New York City was one of the very few major cities in the United States that exhibited growth during the 1960's, increasing from 7.8 million in 1960 to 7.9 million in 1970.



The number of jobs in the Metropolitan Area increased by 1,541,400 between 1950 and 1970, or 25.7 per cent. This growth was evenly divided between the 1950's and 1960's. These numbers refer to jobs, as distinguished from the number of persons employed. The term "jobs" in this context includes self-employed and multiple job holders, as well as employees of private or public organizations.

Historical Job Growth  
1950-1970 (in thousands)

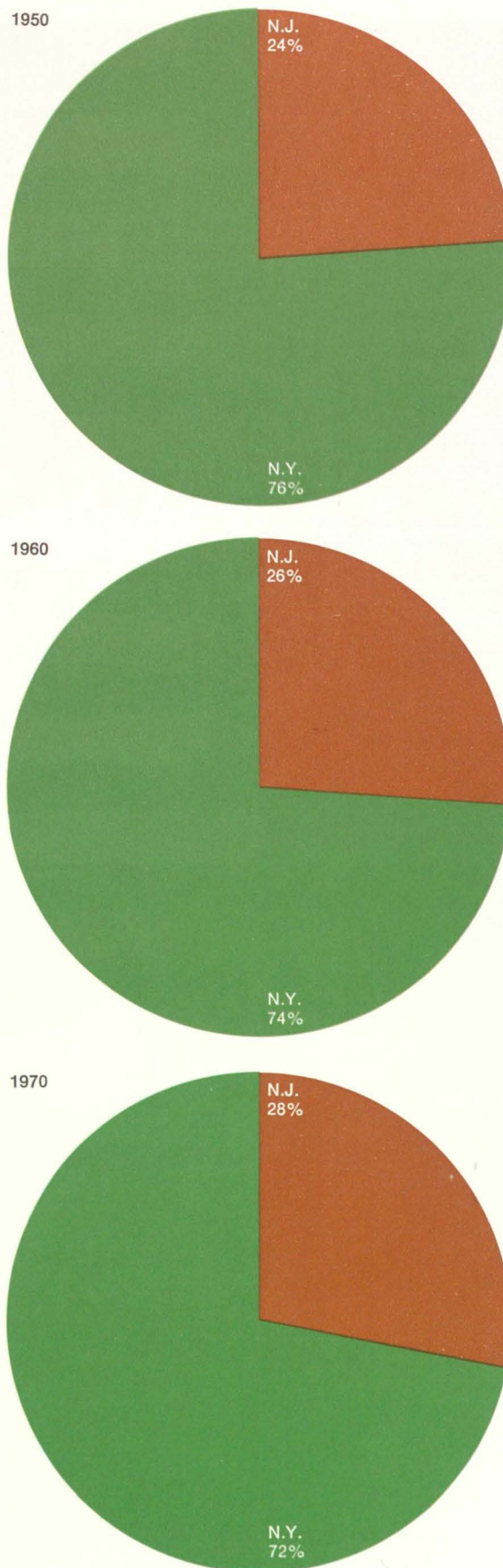
	1950	1960	1970
18-County Area	5,987.1	6,774.2	7,528.5
New Jersey Sector	1,456.9	1,791.0	2,095.4
New York Sector	4,530.2	4,983.2	5,433.1

The increase in jobs in this score of years—1.5 million—corresponds roughly to the entire labor force of Metropolitan Philadelphia.

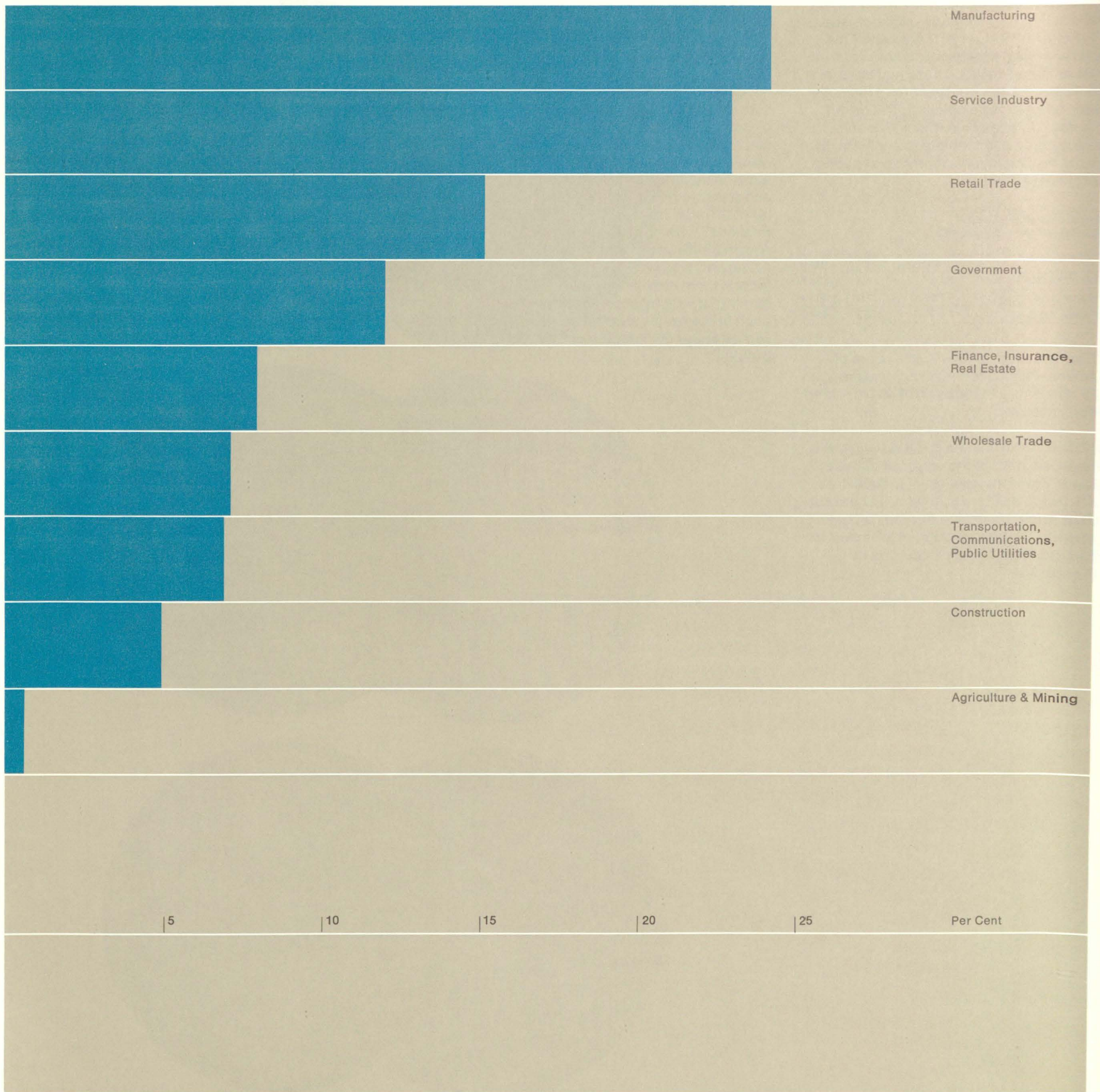
Within the Area, the more rapid growth has occurred in the counties outside New York City; the latter, nonetheless, added 228,000 jobs, a record of growth that might be envied by many a community. The distribution of jobs over the period 1950-1970 is illustrated in Graph 15.

It is significant that no single economic sector accounts for as much as twenty-five per cent of the Metropolitan Area's total employment (Graph 16; p. 42). Manufacturing is the largest employer, accounting for 1.8 million jobs, 24.1 per cent of total employment. Following closely are the service industries, which employ 1.7 million—21.9 per cent—and which include such activities as advertising, interior decorating, hotels and restaurants. The third largest sector is retail trade, accounting for 1.1 million jobs or 15.1 per cent. Government is the Area's fourth largest employer, providing 0.9 million jobs or 11.8 per cent of total jobs. A more detailed tabulation of the number of jobs by economic sector in each of the Area's subdivisions is presented under the heading of "The Labor Supply."

Graph 15  
Distribution of Jobs



Graph 16  
Distribution of Jobs by Major Economic Sector, 1970



During the 1960's, the growth of jobs in the Metropolitan Area kept pace with population, as shown in the table below. In New York City, however, job growth has run ahead of population growth. The addition in the City of two jobs for each one hundred persons means that the City's role as the economic center of the Metropolitan Area is being reinforced rather than weakened. Thus, its economic health should be appraised with this trend in mind.

Jobs as a Percentage of Population

	1950	1960	1970
Metropolitan Area	45.6%	44.9%	45.3%
New Jersey Sector	40.7	40.7	41.4
New York Sector	47.4	46.6	47.0
New York City	50.8	51.9	53.7

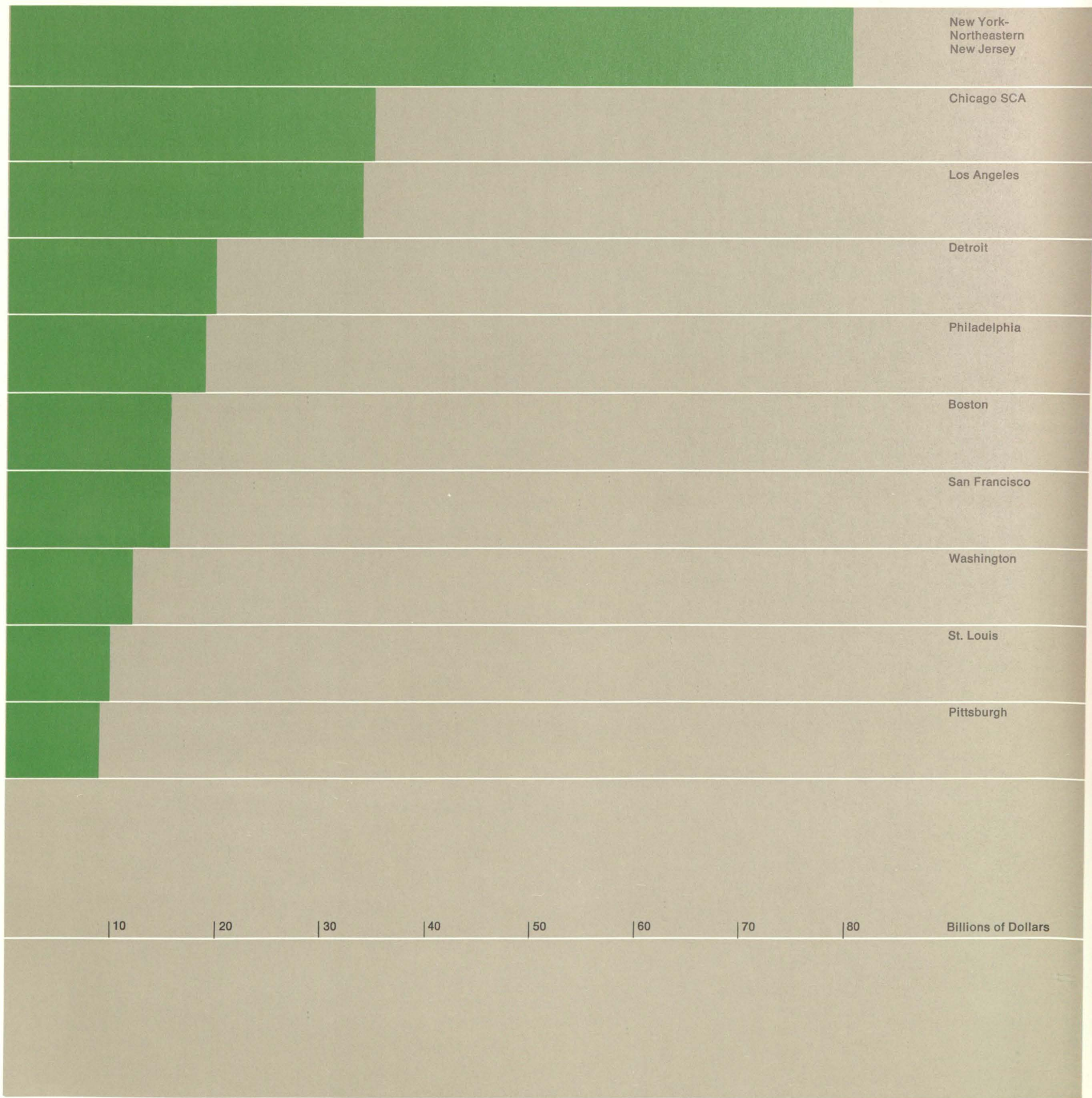
The purchasing power of the Metropolitan Area can best be judged from the income levels of its people. Personal income estimates prepared by the Office of Business Economics show that the income received by persons working in the Area amounted to \$74.6 billion in 1968, including \$200 million earned by commuters residing outside the Metropolitan Area. This sum is higher than Italy's 1968 aggregate personal income of \$69 billion distributed among 53 million persons, and is not much below the \$85 billion of personal income received by Great Britain's 55 million residents.

In 1969, the Area's personal income increased by \$6.2 billion from the 1968 level, to \$80.8 billion. This amount is equal to the combined total earned by the residents of Chicago, Los Angeles and Washington (Graph 17; p. 44).

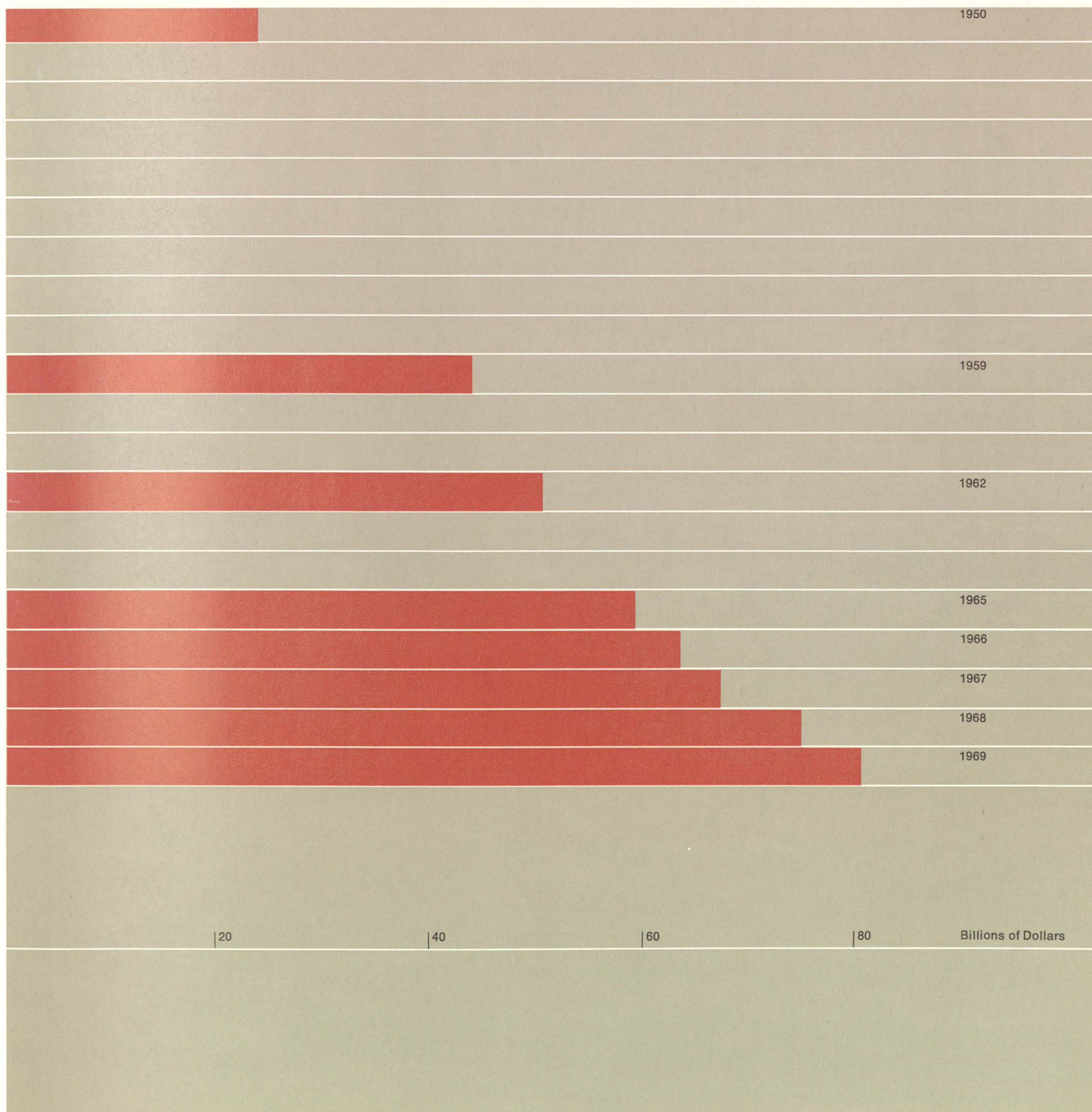
Graph 18 (p. 45) depicts the Area's vigorous income growth since 1950. By 1970, it is estimated that personal income in the Area had increased by \$6.0 billion, to \$86.8 billion. It may be noted that population increased by 26.5 per cent in the 1950-1970 period while income—measured in terms of 1950 dollars—more than doubled.

As in the case of employment, there is no great reliance on any one source of income. Property and net transfer income account for 22 per cent of this Area's personal income, while manufacturing accounts for 20 per cent. Services generate 15 per cent of the Area's total personal income, followed by wholesale and retail trade with a 14 per cent share (Graph 19; p. 46).

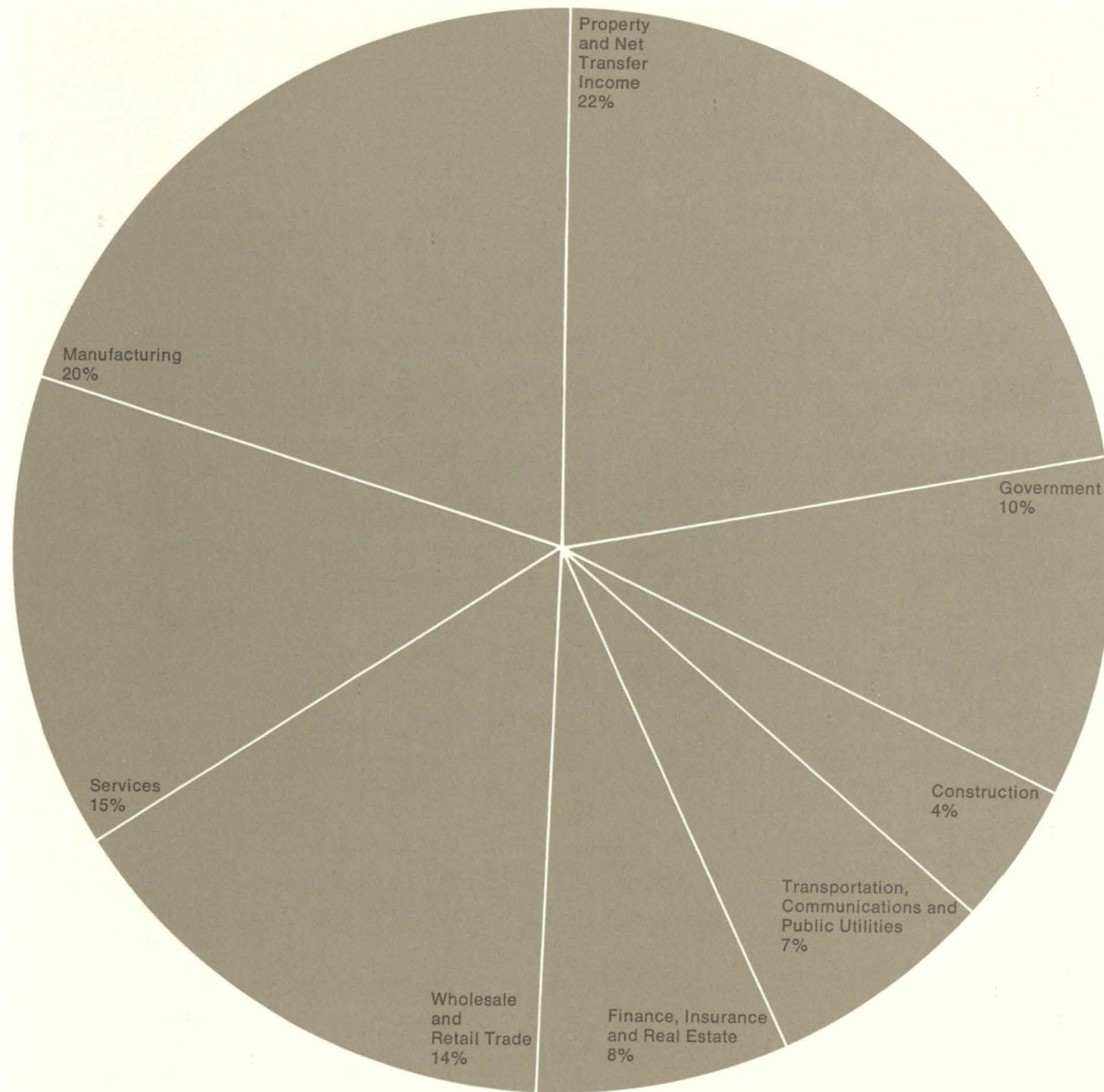
Graph 17  
Personal Income in the Leading Metropolitan Areas, 1969



Graph 18  
Personal Income in the Metropolitan Area,  
1950-1969



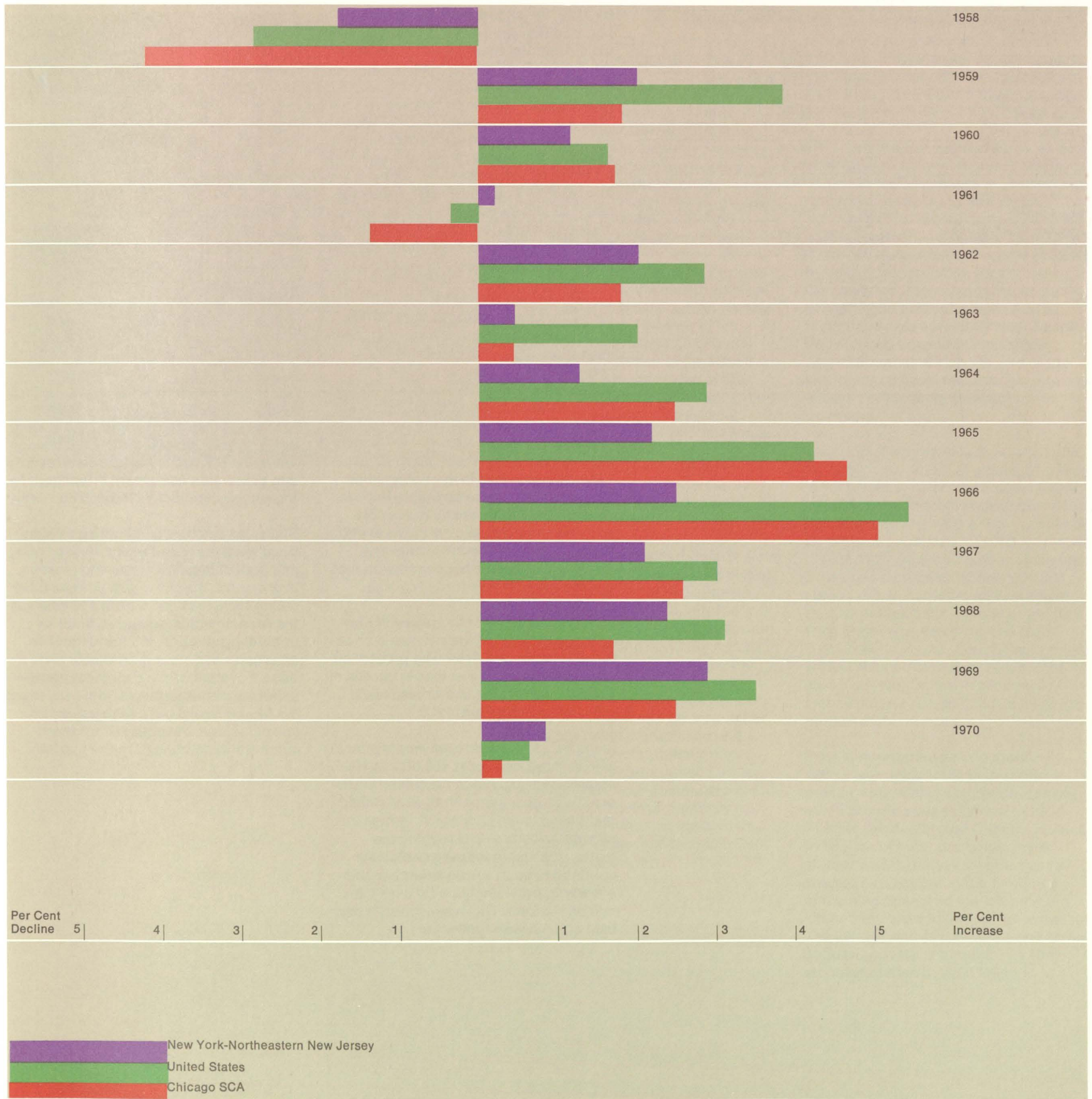
Graph 19  
Sources of Personal Income, 1969



#### Economic Stability

The balanced nature of this Area's economy increases its stability. Cyclical movements have less effect on economic activity here than they do on the economies of the Nation or other major United States urban areas. While the Metropolitan Area's economy has been affected by the Nation's performance, its annual percentage changes since 1952 have been smaller. During periods of economic expansion, employment growth in the Area generally did not keep pace with the Nation as a whole, while other metropolitan areas either matched or exceeded the Country's rate of growth. However, when declines were experienced nationally, employment levels here usually held up better than any other metropolitan area. The extent to which New York and Chicago have been affected by cyclical swings in comparison to the Nation is illustrated in Graph 20 (p. 47). Both are relatively stable compared to the United States, but the New York Area almost always experienced changes that were only fractions of those experienced by the Nation or, for that matter, Chicago.

Graph 20  
 Annual Percentage Changes in Wage and  
 Salary Employment, 1957-1970



Jobs by Major Economic Sector in the Metropolitan Area, 1970-1975  
(in thousands)

Economic Sector	1970	1975	Change	% Change
Manufacturing	1,815.5	1,837.3	+ 21.8	+ 1.2
Service Industry	1,651.7	1,811.6	+159.9	+ 9.7
Retail Trade	1,133.9	1,160.8	+ 26.9	+ 2.4
Government	890.3	988.0	+ 97.7	+11.0
Finance, Insurance & Real Estate	621.5	661.8	+ 40.3	+ 6.5
Wholesale Trade	517.3	531.2	+ 13.9	+ 2.7
Transportation, Communications and Public Utilities	502.8	506.6	+ 3.8	+ 0.8
Construction	361.8	385.3	+ 23.5	+ 6.5
Agriculture and Mining	33.7	32.0	- 1.7	- 5.0
Total Jobs	7,528.5	7,914.6	+386.1	+ 5.1

## The Outlook

By 1975, the economy of the bi-state Metropolitan Area will exhibit some of the substantial structural changes that the decade is expected to bring. Spurred by the continued affluence of the North Atlantic Core Region, by the emergence of new growth industries, and by large additions to demand and productive capacity, the Area's personal income will increase 40 per cent to \$113 billion. The resident population of the eighteen counties will increase by almost one million persons, to 17.5 million. This will be five per cent over the Area's 1970 population of 16.6 million people.

More important than simple numerical growth are the structural changes that will occur as the generation born in the immediate aftermath of World War II comes of age. The number of young adults—those aged 25 to 29—will show a large increase, estimated at 30 per cent. That is to say, the proportion of young adults will increase from 5.7 per cent in 1970 to 7 per cent of total population in 1975. This increase in the prime labor group has broad and favorable implications for the Area's ability to support economic expansion over the near and longer terms. Furthermore, this age group will provide a huge market in that it is the prime family-formation age.

Rising incomes and affluence will play an important role in the economic structure of the bi-state Area. The proportion of households with incomes in excess of \$10,000 is expected to increase markedly between now and 1975.

In the next five years, total employment will increase by almost 400,000. In 1975, employment will reach 7.9 million workers, the largest concentration of skilled manpower in the Country. Although the service industry is challenging the leader, the manufacturing sector will continue to be this Area's number one employer, providing jobs for over 1.8 million workers. This represents 23 per cent of the Area's total jobs.

Implicit in these projections is the anticipation that the dominant theme of the period will be the continuing evolution of the Area as the Nation's first post-industrial urban center. The emphasis will be on new high-technology industries and on the service industries. More jobs will be of a highly skilled nature with an emphasis on higher and continuing education.

Although the anticipated growth of manufacturing might seem small, the situation will be far from stagnant. Growth prospects favor those industries supporting what has been termed the "learning society." High technology manufacturing and service activities—especially new ones in the areas of research and development, environmental management, education, health, recreation, urban renewal, and those providing supporting goods and services to the growing Manhattan office function—will predominate. In environmental management, the production of pollution testing and prevention equipment is fast becoming established in the Metropolitan Area.

Such manufacturing industries as electrical machinery and equipment, printing and publishing, chemicals and plastics, instruments, machinery, and metal fabricating have the best growth potentials in the Area. In other industries, such as apparel production, the trend that has emerged will probably continue: producers of standardized clothing items—uniforms, undergarments, etc.—will leave the Area entirely, but a high-value residue of fashion and better dress manufacturers will remain (Graph 21; p. 49).

Graph 21  
Growth Prospects for Industry in the Metropolitan  
Area to 1975

Low	Medium	High
Food	Lumber	Printing
Tobacco	Furniture	Chemicals
Textiles	Paper	Rubber & Plastics
Apparel	Leather	Metal Fabricating
Petroleum	Glass	Machinery
	Primary Metals	Electrical Equipment
		Transportation Equipment
		Instruments
		Miscellaneous

#### Investment for Growth

The amount and type of investments, both private and public, will continue to have a lasting effect on the Area's economic situation. Public investment is particularly critical because the Area's leadership and prosperity are essentially dependent on superior infrastructures, particularly in the transportation and communications fields. Recent investments in transportation facilities by the public sector have been substantial, although much remains to be done. While the list is myriad, some of the largest are the Verrazano-Narrows Bridge, the Port Newark-Elizabeth containership facilities, the construction of Interstate 80 from Northern New Jersey to the Midwest, redevelopment and expansion of Newark and La Guardia Airports, the completion of the New York State Thruway, the expansion of the New Jersey Turnpike, and the construction of the Long Island Expressway. These and other sizeable public agency investments in specialized facilities, such as The World Trade Center in lower Manhattan, are designed to strengthen the Area's linkages with distant world markets.

Internal transportation, particularly mass transit, has been an area of great public concern and of sizeable investments. This is reflected in New York by the creation of the Metropolitan Transportation Authority and the \$2.5 billion transportation bond issue approved by the voters in 1967. In 1968, New Jersey voters approved a \$640 million transportation bond issue and the commuter railroads are being modernized and improved under the direction of the Department of Transportation. Further, New Jersey-New York commuters are benefitting from the Port Authority's \$200 million investment in the bi-state Port Authority Trans-Hudson rail transit system known as PATH.

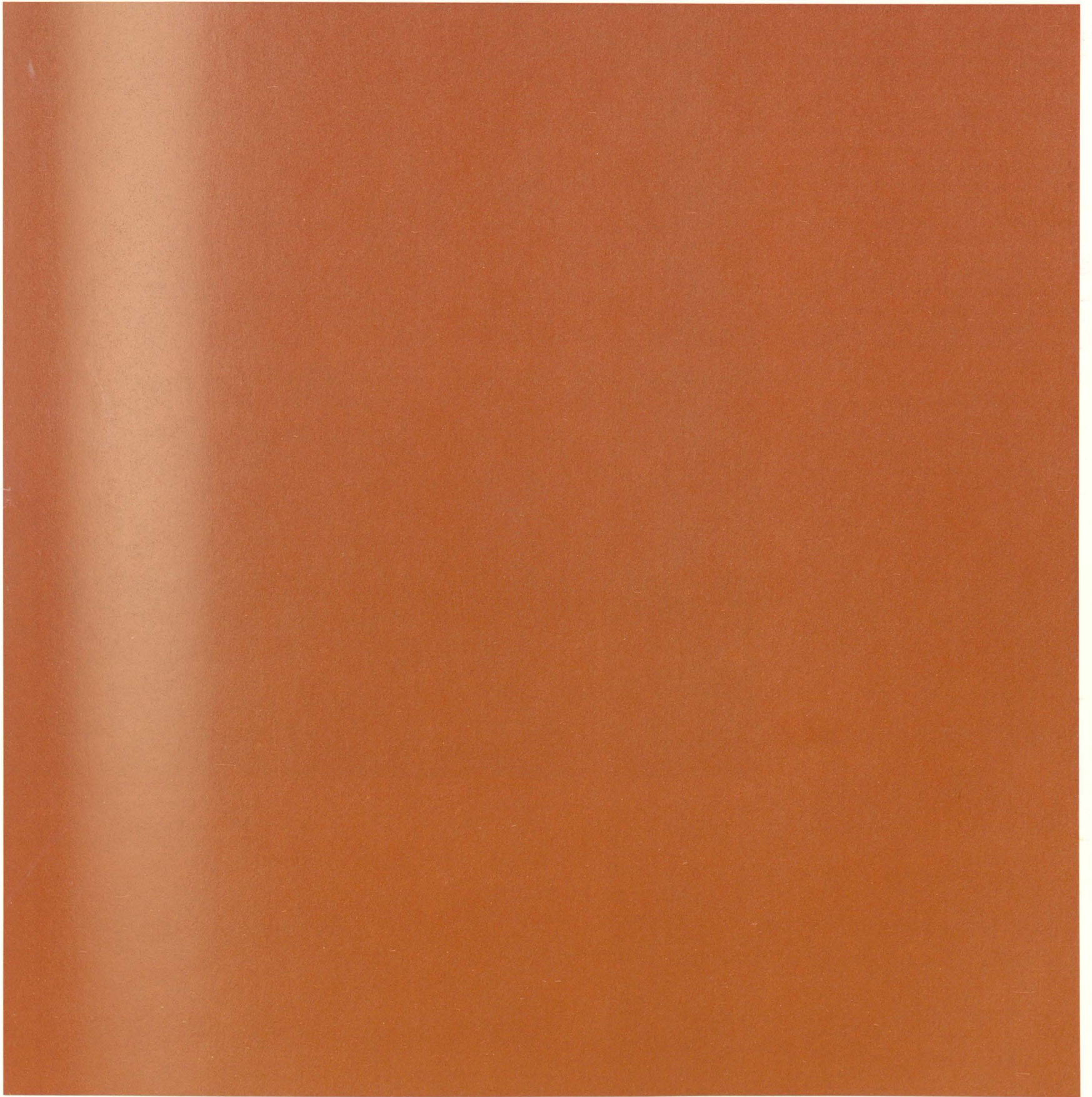
The Area's telephone communications infrastructure is also being improved through the substantial investments of the two principal operating companies—New Jersey Bell Telephone Company and New York Telephone Company.

New Jersey Bell's expenditures for new construction amounted to over \$266 million in 1970, 60 per cent greater than the 1968 figure. There have been corresponding rises in employment (almost 4,000 greater than the 1968 figure) and number of telephones in use (increased by 400,000 since 1968). By 1970, the Company's customers placed an average of over 22 million calls daily. And although the area served by New Jersey Bell extends beyond the nine New Jersey counties which are part of the Metropolitan Area, these nine contain the majority of the units serviced by the Company.

New York Telephone had expenditures for new construction of almost \$1 billion in 1970, nearly twice the amount spent in 1968, and expects to invest over \$10 billion during the 1970's. The number of employees exceeded 100,000 for the first time in 1970, and the number of phones in use has increased by over 600,000 since 1968. In addition, an average of over 60 million calls per day originated from phones serviced by New York Telephone last year. Again, the Company serves sites outside the Area, but the New York-Northeastern New Jersey Metropolitan Area demands a large proportion of its services.

Private investment activity during the 1960's was substantial in the Metropolitan Area. Capital expenditures for manufacturing capacity now exceed \$1 billion annually (see Chapter I). As an indication of other economic investments, the Manhattan skyline was reshaped as 99 major office buildings containing almost 56 million rentable square feet were built during the decade. The level of non-residential construction activity—private and public—in 1968 alone amounted to \$900 million.



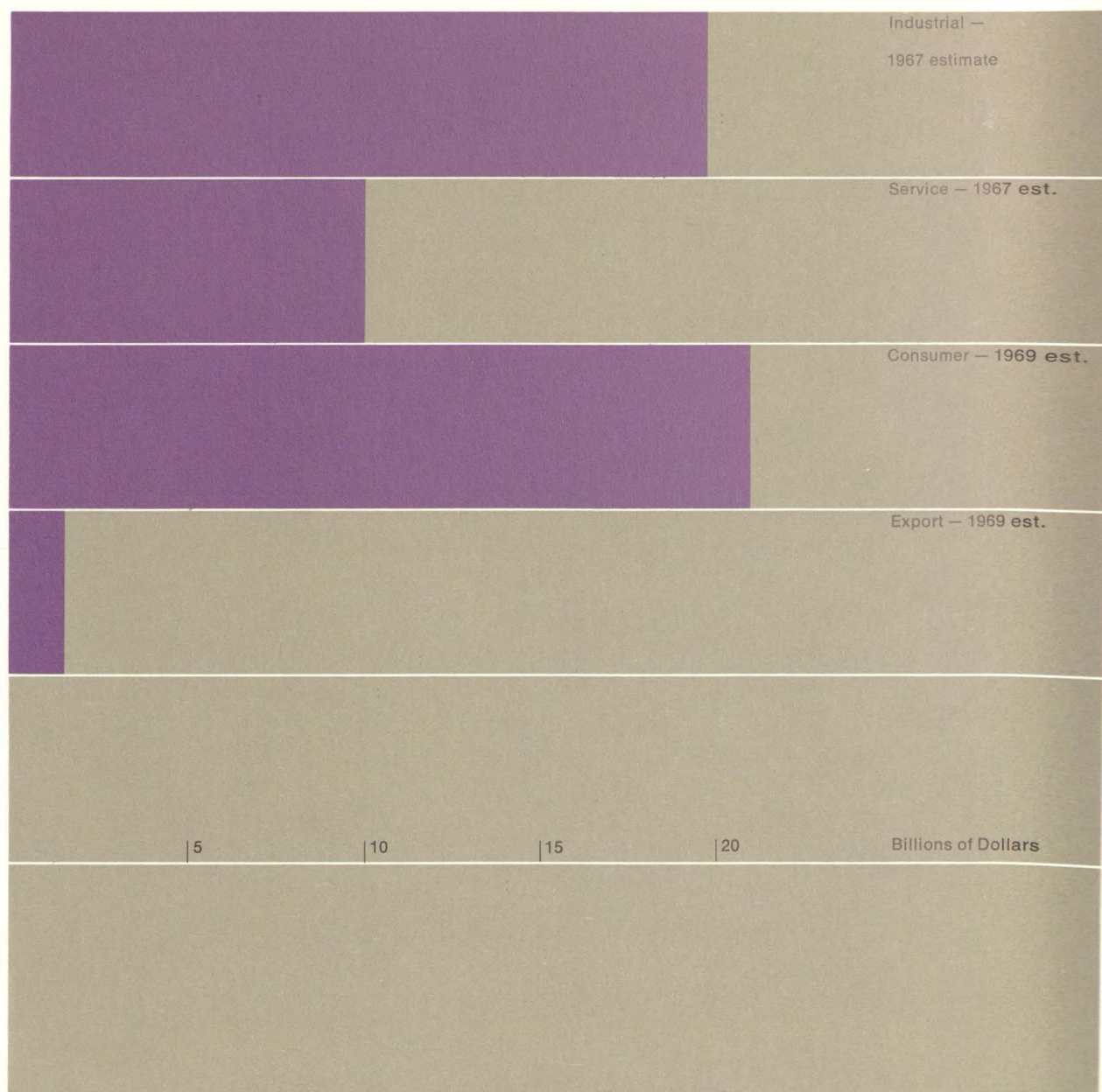


## Markets

Graph 22  
The Area's \$50 Billion Market

Manufacturers located in the New York-Northeastern New Jersey Metropolitan Area have close access to four distinct markets: the industrial market; the service and institutional market; the household consumer market; and the overseas or export market to which the Metropolitan Area's shipping and other foreign commerce facilities offer ready access. Each is a large and growing market. Together, they provide the regionally-based producer with sales opportunities unique in magnitude and variety.

In addition to these four markets, there lies a larger market within overnight trucking range of the Metropolitan Area. The geographic extent of this wider market is described in "Transportation Services."



The bi-state Area's 45,000 plants, distributed among 394 industrial categories, afford the producer of industrial equipment, supplies and semi-manufactures a wide range of market opportunities.

In 1967, the Area's industrial complex produced goods valued at \$48.2 billion, at producers' prices. To produce this volume of output, the Area's manufacturers purchased \$24.4 billion of materials: raw, semi-finished and finished. Of this amount, \$19.8 billion went for purchases of semi-finished and finished components, equipment and other supplies, from sheet steel to machinery, from trucks to typewriter ribbons. The remainder, \$4.6 billion, represents purchases of raw materials.

The matrix table, presented on the following page, shows the size and make-up of the Area's industrial market in greater detail. The industries listed across the top of the table refer to manufacturers located within the Metropolitan Area. They are the buyers of industrial goods. The industries listed down the left side of the table are the sellers of industrial goods and may be located anywhere, in or out of the Area.

The column on the far right, "Total Sales," lists the total sales of each selling industry to all the Area's buying industries. The bottom row, in contrast, indicates the total purchases by each of the Area's industries from all other industries.

The industrial market is dynamic, growing from \$16.4 billion in 1963 to \$19.8 billion in 1967, or at an annual average of five per cent. While available data do not permit a comparably detailed calculation of the 1970 market, it is estimated that the Area's industrial input requirements amounted to \$23 billion in 1970.

A word concerning these estimates:

To depict the purchasing power of this market as a whole, as well as of its component elements, it is necessary to employ estimating techniques. Specifically, the term "industrial market" refers to *purchases of manufactured products required by manufacturers located in the Area*. The estimate of manufacturers' purchases was developed by applying the input-output matrix, prepared by the U. S. Office of Business Economics, to the value of manufacturing output in the Metropolitan Area, as reported in the 1967 U. S. Census of Manufactures. Two points should be kept in mind about the estimates of market-size presented in this and the following sections. First, they refer only to those industrial inputs which are themselves the product of manufacturing industries and thus exclude purchases of raw materials. Second, the geographic source of these input requirements is not identified. Not all of these input requirements are satisfied by local producers; a substantial part of input requirements in several industry groups is supplied by producers located outside the Area's boundaries. The Area's textile mills could not, for example, supply more than a fraction of the consumption of these products by the Area's garment industry.

Vast market opportunities exist for those manufactured goods used by the service sector of the Area's economy. This market consists generally of supplies, fixtures, fittings and equipment—not goods for resale—employed by government establishments, wholesalers, retailers, utilities, transportation, warehousing, the office complex, hospitals, doctors, lawyers, hotels, restaurants, theaters, advertising agencies, consultants, foundations, etc.

Supplies and equipment used by the construction industry are also included and amounted to an estimated \$1.3 billion for 1967. That year is known to have been a severely depressed one for construction, and thus it is highly likely that its "normal" level of purchases of manufactures would be much higher.

The matrix table presents some details of the breakdown of those sales to the service and institutional grouping by each manufacturing industry. This table, which was also developed by using input-output methods, should be read in the same manner as the industrial market table.

Purchases of Manufacturers by Industries Located  
in the Area, 1967 (Millions of Dollars)

Sellers— Located Anywhere	Buyers— Located in the Area																				Total Sales	
	Food	Tobacco	Textiles	Apparel	Lumber	Furniture	Paper	Printing	Chemicals	Petroleum	Rubber & Plastics	Leather	Glass	Primary Metals	Metal Fabricating	Machinery	Electrical Equipment	Transportation Equipment	Instruments	Miscellaneous		Ordnance
Food	882.2	*	2.7	*	*	*	7.9	4.5	151.3	1.1	*	18.3	0.2	0.8	0.7	0.7	*	—	2.5	3.6	—	1,076.7
Tobacco	—	2.9	—	—	—	—	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	2.9
Textiles	1.2	—	217.7	2,493.3	*	29.0	6.5	9.0	0.9	—	53.0	34.7	1.7	3.3	4.1	1.4	2.8	15.7	10.2	44.3	—	2,928.8
Apparel	9.9	—	12.2	1,549.4	0.3	1.2	2.5	—	3.7	0.2	2.5	10.7	1.9	1.2	2.6	2.2	4.1	11.7	1.6	6.6	0.1	1,624.5
Lumber	6.6	*	*	2.2	59.4	63.6	51.6	8.9	9.5	0.2	2.9	7.1	5.2	3.5	12.2	5.6	4.2	60.1	1.3	46.2	0.4	350.7
Furniture	—	—	0.3	0.7	0.4	18.8	0.1	5.9	—	—	0.3	*	0.7	*	3.4	1.1	31.2	18.1	0.8	6.2	*	88.0
Paper	139.7	0.2	9.8	71.4	0.8	9.0	403.7	883.8	141.5	7.4	19.8	12.1	17.3	4.5	31.8	7.7	42.1	7.3	16.5	77.5	0.2	1,904.2
Printing	30.8	0.1	0.3	0.8	*	*	11.3	587.2	11.2	*	0.2	0.2	0.1	0.1	14.2	0.5	5.9	0.7	0.4	12.6	*	676.8
Chemicals	38.5	0.1	91.3	164.5	2.7	13.1	55.7	144.2	1,104.9	30.2	201.4	8.0	21.9	40.7	50.9	11.8	54.9	24.7	32.2	93.0	0.4	2,185.3
Petroleum	14.4	*	1.3	7.6	0.8	1.0	10.7	14.0	141.5	73.5	1.9	0.8	6.7	12.4	7.4	9.5	15.0	10.4	2.0	6.7	0.3	337.9
Rubber & Plastics	17.4	—	6.7	38.4	0.2	31.6	13.1	23.3	108.6	0.1	41.0	53.6	8.7	2.2	19.5	26.8	70.4	38.2	24.4	89.4	2.2	615.9
Leather	0.2	—	0.1	24.6	0.1	0.6	0.2	0.3	0.5	0.1	1.7	133.0	0.2	0.3	1.0	0.9	0.3	0.2	1.2	13.7	*	179.2
Glass	53.2	—	1.7	0.6	1.1	9.9	4.0	—	68.8	2.5	9.0	0.2	73.1	5.2	17.7	16.8	70.1	20.8	10.4	16.1	—	381.4
Primary Metals	0.2	—	*	1.4	2.3	37.8	3.1	2.6	46.0	2.3	6.8	1.3	8.6	711.9	725.3	255.7	292.3	399.5	62.1	128.5	7.2	2,695.1
Metal Fabricating	137.5	0.1	0.3	8.5	3.3	38.1	18.8	8.5	150.7	6.5	12.1	5.4	7.3	21.0	136.2	117.0	176.8	186.1	32.8	63.3	1.7	1,132.3
Machinery	3.4	—	3.4	5.0	0.8	2.7	4.8	13.2	18.5	0.3	2.9	0.2	6.1	37.9	65.7	357.0	102.3	281.7	22.3	9.0	1.5	938.8
Electrical Equipment	0.5	—	0.1	0.9	0.1	2.9	0.3	0.7	4.2	*	2.4	0.1	2.2	19.6	25.7	131.5	800.4	167.1	84.9	30.6	10.1	1,284.4
Transportation Equipment	1.0	—	*	0.5	0.1	0.4	0.1	2.5	0.4	*	3.6	*	0.5	10.0	32.6	36.6	48.2	473.7	16.8	12.0	39.6	678.9
Instruments	0.7	*	0.6	6.7	0.1	2.6	1.4	45.3	21.7	0.1	1.5	3.9	0.3	1.0	10.2	14.0	34.5	31.4	72.4	4.2	1.9	254.3
Miscellaneous	0.6	—	3.3	153.3	0.3	1.2	0.4	9.6	7.9	0.2	6.0	11.3	1.7	1.6	4.4	1.9	4.7	6.1	5.4	151.9	*	371.8
Ordnance	—	—	—	—	—	—	*	1.3	*	—	*	—	—	0.1	3.9	1.0	19.7	22.6	2.7	0.1	3.4	54.8
Total Purchases	1,338.0	3.4	351.8	4,529.9	72.7	263.5	596.2	1,765.0	1,991.9	124.7	369.1	301.2	164.6	877.5	1,169.7	999.7	1,780.0	1,776.1	402.8	815.6	69.0	19,762.4

\*Less than \$0.05 million.

Totals may not add due to rounding

Purchases of Manufactures by Area Service  
and Institutional Users, 1967 (Millions of Dollars)

Sellers— Located Anywhere	Buyers— Located in the Area														Total Sales
	New Construction	Maintenance & Repair Construction	Transportation & Warehousing	Communications	Electric, Gas, Water, & Sanitation Services	Wholesale & Retail Trade	Finance & Insurance	Real Estate	Hotels, Personal & Repair Services	Business Services	Automobile Repair	Amusements	Medical, Educational Services & Non-Profit Organizations	Government	
Food	1.3	0.3	13.9	—	0.2	92.6	—	14.3	0.3	0.2	—	—	42.8	88.4	254.3
Tobacco	—	—	—	—	*	0.5	—	0.9	—	—	—	—	—	0.1	1.5
Textiles	7.7	0.3	1.8	—	0.2	4.4	—	2.9	7.0	0.4	—	—	*	8.6	33.3
Apparel	1.8	1.6	1.5	0.5	0.8	18.6	—	4.9	21.1	—	1.5	—	2.7	29.5	84.5
Lumber	177.0	86.8	0.3	—	0.3	17.6	—	4.0	—	—	—	—	—	1.9	287.9
Furniture	26.3	0.5	—	—	—	5.5	—	1.1	—	—	—	—	—	25.8	59.2
Paper	10.5	8.5	2.1	1.1	3.0	172.4	26.0	4.7	10.2	12.1	0.4	0.2	7.4	17.1	275.7
Printing	0.1	0.1	5.0	0.2	0.3	29.9	40.0	11.3	1.1	836.0	*	6.3	64.8	51.6	1,046.7
Chemicals	25.5	109.5	5.1	0.2	7.3	56.0	0.1	44.6	44.5	28.6	10.5	8.2	91.8	236.4	668.3
Petroleum	55.8	64.8	162.5	11.0	28.5	171.8	11.1	65.5	20.3	13.8	15.8	2.4	20.7	142.4	786.4
Rubber and Plastics	24.2	16.7	20.8	2.0	0.7	40.7	1.0	9.0	8.1	2.0	31.0	0.2	6.2	36.2	198.8
Leather	—	—	—	—	—	3.2	—	1.3	22.5	—	—	0.7	—	1.0	28.7
Glass	293.5	60.4	1.3	*	0.1	24.3	—	5.6	8.7	1.3	24.0	—	1.0	9.1	429.3
Primary Metals	167.7	63.1	25.8	0.8	9.6	10.8	—	5.4	0.7	0.3	—	—	—	6.0	290.2
Metal Fabricating	360.9	102.7	11.5	—	*	36.3	—	10.7	7.4	1.5	27.1	—	0.6	161.8	720.5
Machinery	57.8	39.4	10.6	0.1	0.4	42.8	*	25.7	0.2	74.1	18.9	*	0.2	97.3	367.5
Electrical Equipment	87.7	44.4	16.7	22.8	3.4	40.2	0.3	10.6	83.1	17.6	29.3	0.1	1.4	979.6	1,337.2
Transportation Equipment	2.0	1.7	59.9	0.5	0.4	28.2	0.3	9.1	2.0	2.4	111.9	0.1	0.9	1,635.6	1,855.0
Instruments	10.5	8.4	0.4	0.3	—	16.1	0.4	4.3	18.5	20.5	—	14.8	42.4	107.0	243.6
Miscellaneous	4.4	9.3	0.1	—	*	23.8	—	1.8	44.6	44.6	—	4.6	6.6	8.6	148.4
Ordnance	0.3	—	—	—	—	2.4	—	0.2	0.1	—	—	—	—	903.4	906.4
<b>Total Purchases</b>	<b>1,315.0</b>	<b>618.5</b>	<b>339.3</b>	<b>39.5</b>	<b>55.2</b>	<b>838.1</b>	<b>79.2</b>	<b>237.9</b>	<b>300.4</b>	<b>1,055.4</b>	<b>270.4</b>	<b>37.6</b>	<b>289.5</b>	<b>4,547.4</b>	<b>10,023.4</b>

\*Less than \$0.05 million.

## The Industrialist's \$21 Billion Consumer Market

Manufacturers engaged in supplying consumer needs will find that the Metropolitan Area is the Nation's largest consumer market, concentrated within a relatively narrow geographic compass.

In 1969, the Metropolitan Area's residents, numbering, in that year, an estimated 16.5 million persons, received \$80.6 billion of personal income, or an average of \$4,900 per person. An additional \$0.2 billion was earned by commuters working in the Area but residing outside its eighteen counties and, therefore, was not included in the Area's consumer market. The per capita average here is highest among the largest 115 metropolitan areas in the Continental United States, except for San Francisco.

Wages and salaries account for 71 per cent, or \$57.3 billion, of the total personal income received by the Area's residents. Property income and dividends account for another 17 per cent, while proprietors' income and net transfer payments constitute the remainder.

Out of the \$80.6 billion of personal income received in 1969, an estimated \$14.4 billion went for taxes—Federal, state and local—and \$4.0 billion for savings. The remainder, \$62.2 billion, represents purchases of goods and services, or an average of \$3,778 for every man, woman and child residing here. This per capita consumption rate exceeds the Nation's by about 33 per cent.

Of the \$62.2 billion spent, \$41.1 billion went for services: housing, medical care, retailers' mark-ups, education, amusement, repair services, and others.

The remaining \$21.1 billion represents the amount received by producers for the manufactured goods purchased in 1969 by the Metropolitan Area's consumers; the following table presents industry-by-industry estimates of these sales. The level of producers' sales in 1969 was 7 per cent higher than in 1968. The table also presents some estimates of this market for 1970.

Sales of Manufactured Products to the Household Consumer Market

Class of Product	Millions of Dollars		
	1968	1969	1970
Food	7,708.5	8,263.6	8,880.9
Tobacco	763.1	818.1	879.2
Textiles	380.4	407.8	438.3
Apparel	2,216.9	2,376.6	2,554.1
Lumber	35.4	37.9	40.8
Furniture	487.5	522.6	561.7
Paper	203.0	217.6	233.8
Printing	487.9	523.0	562.1
Chemicals	904.6	969.8	1,042.2
Petroleum	1,271.1	1,362.7	1,464.5
Rubber & Plastics	287.6	308.3	331.4
Leather	468.0	501.7	539.1
Glass	70.2	75.2	80.8
Primary Metals	3.5	3.7	4.0
Metal Fabricating	144.4	154.8	166.4
Machinery	102.1	109.4	117.6
Electrical Equipment	906.4	971.6	1,044.2
Transportation Equipment	2,534.1	2,716.6	2,919.6
Instruments	155.4	166.6	179.0
Miscellaneous	513.8	550.8	591.9
Ordnance	27.8	29.8	32.1
<b>Total</b>	<b>19,671.7</b>	<b>21,088.2</b>	<b>22,663.7</b>

## Production for Export—A High Potential Market

Export Sales Potential for Manufactured Goods  
Produced in the New York-Northeastern  
New Jersey Metropolitan Area, 1969

Commodity Group	Millions of Dollars	
	Actual	Potential
Food	117	134
Textiles	35	35
Apparel	51	82
Lumber	10	10
Furniture	2	3
Paper	17	52
Printing	116	116
Chemicals	293	391
Petroleum	35	35
Rubber & Plastics	21	21
Leather	2	9
Glass	10	16
Primary Metals	84	84
Metal Fabricating	37	85
Machinery	107	278
Electrical Equipment	165	241
Transportation Equipment	187	315
Instruments	59	123
Miscellaneous	133	138
<b>Total</b>	<b>1,481</b>	<b>2,168</b>

The New York-Northeastern New Jersey Metropolitan Area offers distinct advantages to manufacturers whose products are marketed in distant and dispersed markets, foreign as well as domestic.

Foreign marketing can be accomplished easily from the Area, where the producer has at his disposal a highly developed transport network and supporting services, including established marketing services, which will be enhanced by The World Trade Center.

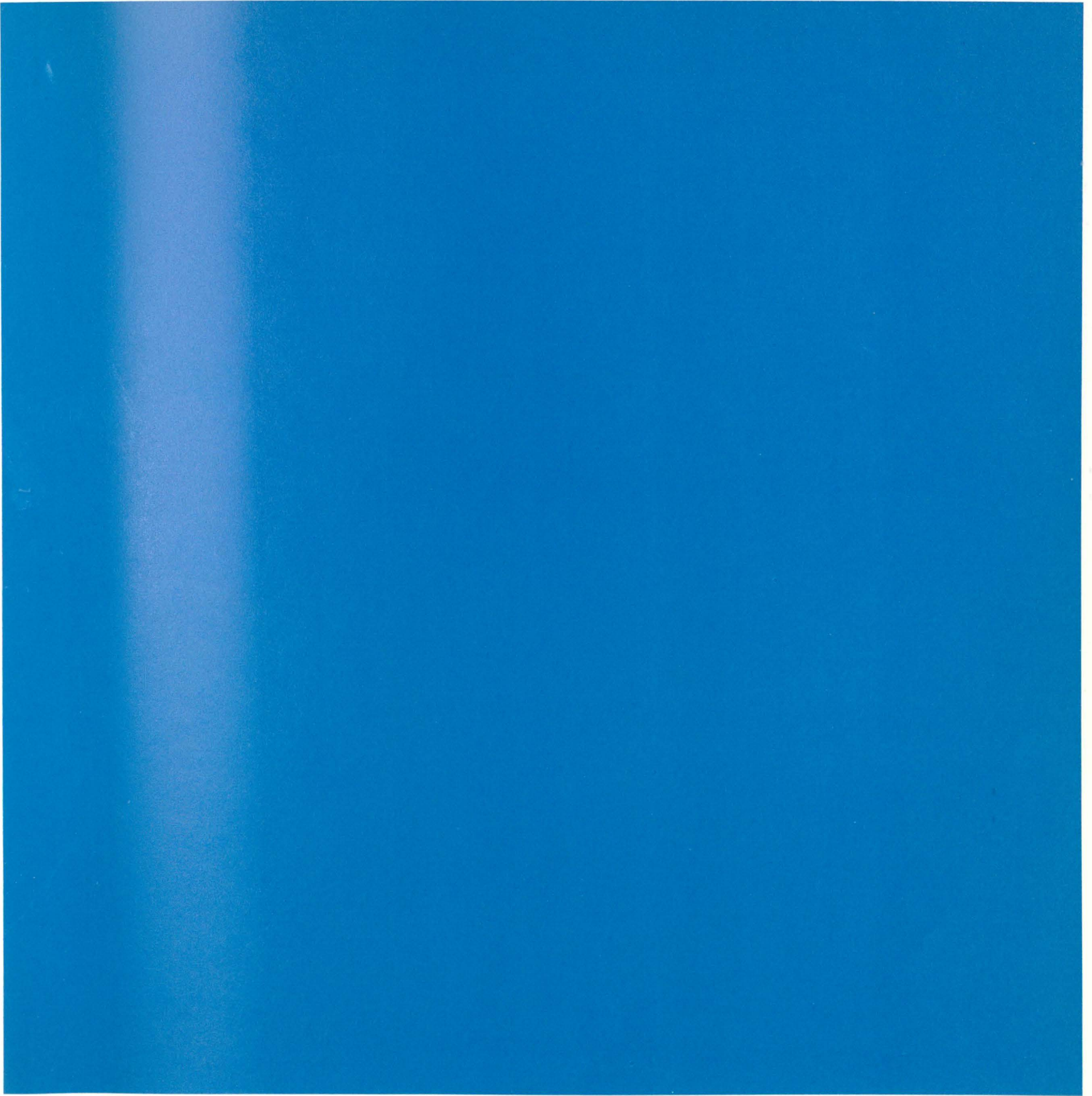
In 1969, foreign markets absorbed \$1.5 billion worth of merchandise manufactured in the Metropolitan Area, or 3 per cent of the Area's industrial production. This level of manufactured exports, which is higher than the export totals of 44 of the Nation's 50 States, represents 5.1 per cent of total United States exports.

Basic chemicals and drugs accounted for the bulk of the chemicals and allied products shipped abroad. Communication equipment, electronic components and electric industrial apparatus were the principal products in the electrical machinery category. Large deliveries were made of motor vehicles, books and a wide range of specialty food products. Sales of non-electrical machinery consisted mostly of general industrial, special industry and office machines.

The Area's economy produces not only goods for direct shipment to foreign destinations, but also goods for ultimate export through other areas and states. Such indirect exports are of particular importance in industries whose products require further processing, or constitute components and parts for assembly into machinery or transport equipment. The Area's large chemical and instrumentation industries are particularly affected by this type of transaction.

While the Area is one of the Nation's major export production centers, large potential export markets remain untapped. Illustrative of this potential is the fact that the Nation as a whole exported 5.3 per cent of its industrial output in 1969, while the Area, although endowed with highly developed facilities for foreign commerce, exported only 3.1 per cent of its output. Thus, if the Area's industries had participated in export trade at the national rate, the Metropolitan Area's 1969 exports would have amounted to \$2.2 billion, 46 per cent higher than the actual.



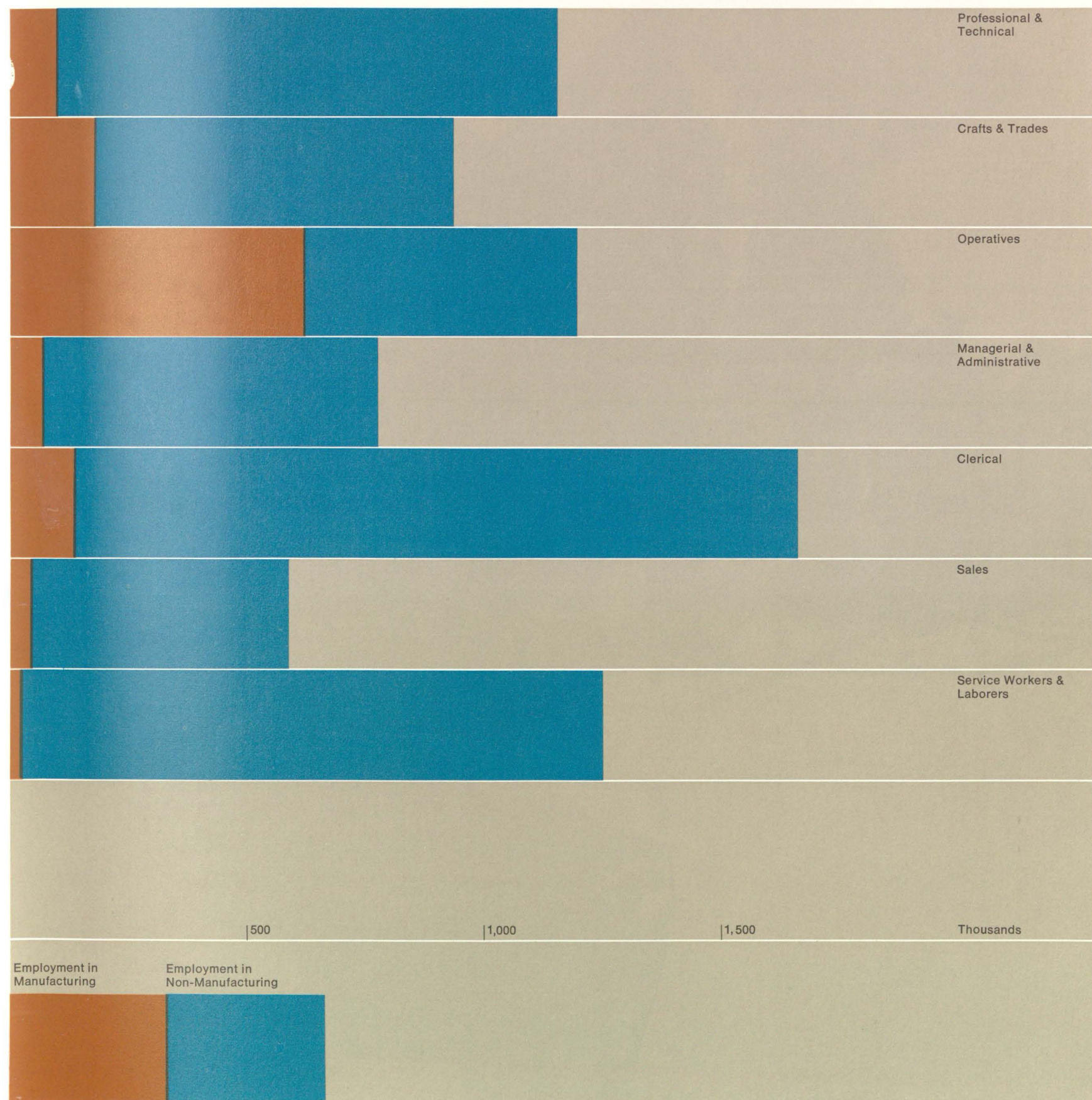


## The Labor Supply

Many factors combine to make the Metropolitan Area attractive to the industrialist as a source of manpower required in his operations. The manufacturing base is highly diversified and, thus, embraces a highly diversified profile of skills. While manufacturing is the most important source of employment in the Metropolitan Area, it is by no means the preponderant activity. As a result, the industrialist may tap related skills which are present in abundance in the broad range of non-manufacturing activities within the Metropolitan Area. Indeed, labor in the Area exhibits a high degree of mobility in seizing job opportunities, regardless of the economic sector in which they may occur.

The Metropolitan Area consists of seven labor market areas. These conform to areas designated by the United States Bureau of Labor Statistics, with one exception. The Monmouth County Labor Area in New Jersey has been combined with the Perth Amboy Labor Area since the latter's two counties, Middlesex and Somerset, together with Monmouth are involved in a substantial interchange of labor. In varying degrees, such interchanges are true for all of the labor areas in the Metropolitan Area. Since labor areas are based on the residence of labor, each exports workers to industry located in adjacent labor areas and to points beyond. This is another aspect of labor mobility in the Metropolitan Area.

Graph 23  
The Supply of Skills in the Metropolitan Area, 1970







The 1970 adult civilian labor force resident in the eighteen counties that make up the Metropolitan Area is estimated at 6.9 million persons—4.3 million men and 2.6 million women. The term "labor force" includes all persons, 20 years and over, either employed or looking for work. The Area also has a substantial pool of teenagers, aged 14-19, employed or looking for work, which in 1970 was estimated at 641,000. In addition, the resident labor force is augmented by a substantial number of commuters residing outside the Metropolitan Area in New Jersey, New York, Connecticut and even Pennsylvania.

The New York sector, with a resident labor force of 4.9 million, or 70 per cent of the Area total, contains the two largest Metropolitan labor markets: New York City and Nassau-Suffolk. The New Jersey sector, with 2.0 million persons in its resident labor force, shows a more even distribution among its four labor markets, although the largest, comprising Essex, Morris and Union Counties, includes the cities of Newark and Elizabeth, two well-established industrial and business centers.

Detailed information on current commuting patterns of industrial labor in the Metropolitan Area will be available in 1972. Such data, furnished upon request, will show the area from which manufacturers in each county or major municipality draw their supply of labor.

In 1970, there were an estimated 7.5 million jobs in the Area. The job total, it should be noted, exceeds the labor force because of dual job holding and inbound flows of workers residing outside the Metropolitan Area. The largest employer category is manufacturing with 1.8 million jobs, 24 per cent of the Area total. The Metropolitan Area's labor force has accommodated itself to the technological changes in industries that have occurred during the last twenty years. As the Area's industries have become more technologically-oriented, the labor force has moved toward the professional and technical fields.

The second largest source of jobs lies in the services field, which includes various business and personal services, legal, medical and health services, and amusements and recreational activities. Particularly important in the services field is the business services segment—marketing, accounting, consulting, management, engineering, and design services to mention a few of the specialties. In total, the services grouping accounts for 1.7 million jobs, approximately 22 per cent of all Area jobs.

The only other activity that employs over one million people is retail trade, whose 1.1 million jobs account for 15 per cent of the Area's total.

The 5.4 million jobs in the New York sector account for seven out of every ten jobs in the Metropolitan Area. The service industry is the leading employer in this sector with 1.3 million jobs, while manufacturing's 1.1 million jobs are a close second.

Employers located in the New Jersey sector provided 2.1 million jobs. Manufacturing, with 0.7 million jobs, is a relatively more important source of employment here, accounting for about a third of total jobs, in contrast to a fifth of the New York side's employment.

Age, Sex and Residence of the  
Metropolitan Area Labor Force, 1970 (Thousands)

Age Groups	Total		Men					Women					Supplemental Labor Force		
	20 & Over	20-24	25-34	35-44	45-54	55-64	65+	20-24	25-34	35-44	45-54	55-64	65+	M Teens 14-19	W 14-19
Metropolitan Area	6,921	487	954	955	957	707	243	409	442	519	658	465	125	331	310
New York Sector-	4,879	343	673	659	649	497	177	293	326	369	461	339	93	225	213
New York City	3,482	254	490	425	419	357	135	224	255	263	324	262	74	146	140
Nassau-Suffolk	948	63	124	163	164	92	26	45	46	72	95	46	12	57	51
Westchester-Rockland	449	26	59	71	66	48	16	24	25	34	42	31	7	22	22
New Jersey Sector-	2,042	144	281	296	308	210	66	116	116	150	197	126	32	106	97
Bergen-Passaic	559	36	72	80	88	62	18	31	29	40	56	37	10	28	26
Hudson	261	20	34	33	36	28	10	16	17	19	25	18	5	12	11
Essex-Morris-Union	747	51	102	104	110	78	25	43	45	57	72	49	11	38	35
Middlesex-Somerset-Monmouth	475	37	73	79	74	42	13	26	25	34	44	22	6	28	25

Major Industry and Place of Work of  
Metropolitan Area Employment, 1970 (Thousands)

	All Jobs	Manufac- turing	Agricul- ture & Mining	Construc- tion	Transportation Communications Public Utilities	Whole- sale Trade	Retail Trade	Finance Insurance Real Estate	Services	Gov't.
Metropolitan Area	7,528.5	1,815.5	33.7	361.8	502.8	517.3	1,133.9	621.5	1,651.7	890.3
New York Sector -	5,433.1	1,129.2	10.4	255.5	371.5	391.9	818.9	523.8	1,265.8	666.1
New York City	4,236.4	871.3	3.4	180.0	319.8	340.1	578.4	472.1	971.8	499.5
Nassau-Suffolk	777.3	163.1	4.9	50.1	31.1	32.6	165.5	33.0	182.2	114.8
Westchester-Rockland	419.4	94.8	2.1	25.4	20.6	19.2	75.0	18.7	111.8	51.8
New Jersey Sector -	2,095.4	686.3	23.3	106.3	131.3	125.4	315.0	97.7	385.9	224.2
Bergen-Passaic	526.9	181.6	2.6	32.4	24.6	36.9	86.6	19.7	95.1	47.4
Essex-Morris-Union	859.4	259.4	7.2	41.1	52.6	53.0	127.3	58.0	173.4	87.4
Hudson	286.0	118.1	0.1	7.7	34.6	17.5	33.0	10.0	36.8	28.2
Middlesex-Somerset-Monmouth	423.1	127.2	13.4	25.1	19.5	18.0	68.1	10.0	80.6	61.2

The accompanying tables, arranged by major occupational groups, summarize the skills found in the Metropolitan Area's employed labor force in manufacturing and non-manufacturing industries. These magnitudes are dependent on the 1970 level of employment (7,528,500). They should not be viewed as hard and fast figures. They are estimates derived from application of the 1970 detailed occupational matrix of the Bureau of Labor Statistics to current New Jersey and New York State employment statistics, adjusted to reflect known differences between this Area and the national profile.

The Supply of Professional, Technical and Related Skills, 1970 (Thousands)

Professional, Technical and related manpower is quite extensive in the Metropolitan Area, accounting for 15.5 per cent of the labor force. In size, this highly specialized pool of skills, just under 1.2 million in number, is equal to the entire work force of the Washington, D.C. Metropolitan Area. As may be seen in the tabulation, the manufacturing industries in the Area absorb a substantial portion of this skilled group. As would

be expected, close to a half of all engineers and chemists are employed by manufacturing industries. In all cases, the industrialist has access to a substantial reservoir of professional and technical talent. This broad grouping contains a 146,000 support force of technicians, specialists and para-professionals, about 60,000 of whom are employed in the Area's manufacturing establishments.

	Metropolitan Area			New Jersey Sector			New York Sector		
	Employed in:			Employed in:			Employed in:		
	Total	Manu- facturing	All Other Activities	Total	Manu- facturing	All Other Activities	Total	Manu- facturing	All Other Activities
Professional, Technical & Related Workers	1,166.0	189.0	977.0	347.2	82.0	265.2	818.8	107.0	711.8
Engineers —	111.5	53.6	57.9	46.7	28.8	17.9	64.8	24.8	40.0
Aeronautical	3.5	1.8	1.7	1.6	0.8	0.8	1.9	1.0	0.9
Chemical	10.5	4.6	5.9	6.2	2.7	3.5	4.3	1.9	2.4
Civil	19.2	6.1	13.1	5.6	0.6	5.0	13.6	5.5	8.1
Electrical	32.8	14.8	18.0	12.0	8.5	3.5	20.8	6.3	14.5
Industrial	9.5	6.4	3.1	5.6	4.5	1.1	3.9	1.9	2.0
Mechanical	23.3	10.4	12.9	8.2	5.2	3.0	15.1	5.2	9.9
Others	12.7	9.5	3.2	7.5	6.5	1.0	5.2	3.0	2.2
Natural Scientists —	21.0	9.4	11.6	8.4	4.9	3.5	12.6	4.5	8.1
Chemists	12.3	6.1	6.2	4.9	3.2	1.7	7.4	2.9	4.5
Mathematicians	2.0	0.6	1.4	0.8	0.3	0.5	1.2	0.3	0.9
Physicists	2.8	0.7	2.1	0.9	0.4	0.5	1.9	0.3	1.6
Others	3.9	2.0	1.9	1.8	1.0	0.8	2.1	1.0	1.1
Technical Workers & Specialists —	145.8	59.8	86.0	44.4	23.5	20.9	101.4	36.3	65.1
Draftsmen	27.5	11.4	16.1	8.4	4.5	3.9	19.1	6.9	12.2
Electro & Mechanical Engineering Technicians	45.2	18.5	26.7	13.8	7.3	6.5	31.4	11.2	20.2
Physical Science Technicians	5.5	2.3	3.2	1.7	0.9	0.8	3.8	1.4	2.4
Civil Engineering Technicians	15.2	6.2	9.0	4.6	2.4	2.2	10.6	3.8	6.8
Technical Writers & Illustrators	4.9	2.0	2.9	1.5	0.8	0.7	3.4	1.2	2.2
Safety & Sanitation Inspectors	4.7	1.9	2.8	1.4	0.7	0.7	3.3	1.2	2.1
Product Test & Inspection Specialists	7.3	3.0	4.3	2.2	1.2	1.0	5.1	1.8	3.3
Data Process, System Analysis & Programming Specialists	10.2	4.1	6.1	3.1	1.6	1.5	7.1	2.5	4.6
Others	25.3	10.4	14.9	7.7	4.1	3.6	17.6	6.3	11.3
Medical & Other Health Workers	221.3	2.5	218.8	61.0	0.8	60.2	160.3	1.7	158.6
Teachers	240.5	0.5	240.0	73.6	0.2	73.4	166.9	0.3	166.6
Social Scientists —	9.9	1.8	8.1	2.2	0.4	1.8	7.7	1.4	6.3
Economists	4.0	0.8	3.2	0.9	0.2	0.7	3.1	0.6	2.5
Statisticians & Actuaries	5.2	0.8	4.4	1.2	0.2	1.0	4.0	0.6	3.4
Others	0.7	0.2	0.5	0.1	—	0.1	0.6	0.2	0.4
Other Prof., Tech. & Kindred Workers —	416.0	61.4	354.6	110.9	23.4	87.5	305.1	38.0	267.1
Accountants and Auditors	80.9	10.4	70.5	22.1	4.9	17.2	58.8	5.5	53.3
Others	335.1	51.0	284.1	88.8	18.5	70.3	246.3	32.5	213.8

The Supply of Sales Workers Skills, 1970 (Thousands)

There are 583,400 workers employed in this Area who are classified as salesworkers. Two-thirds of these workers are employed in wholesaling or

retailing establishments located throughout the Area.

	Metropolitan Area			New Jersey Sector			New York Sector		
	Employed in:			Employed in:			Employed in:		
	Total	Manu- facturing	All Other Activities	Total	Manu- facturing	All Other Activities	Total	Manu- facturing	All Other Activities
Sales Workers	583.4	81.9	501.5	159.9	22.1	137.8	423.5	59.8	363.7

The Supply of Craftsmen & Related Skills, 1970  
(Thousands)

Craftsmen in the Metropolitan Area number 936,000, of which 352,000 are employed by manufacturing industries. This group, consisting of

mechanics and journeymen, is the most skilled of the manual work force.

	Metropolitan Area			New Jersey Sector			New York Sector		
	Employed in:			Employed in:			Employed in:		
	Total	Manu- facturing	All Other Activities	Total	Manu- facturing	All Other Activities	Total	Manu- facturing	All Other Activities
Craftsmen & Related Workers	935.6	351.8	583.8	315.9	145.4	170.5	619.7	206.4	413.3
Construction Craftsmen –	206.9	25.1	181.8	73.9	12.5	61.4	133.0	12.6	120.4
Carpenters	53.9	4.4	49.5	19.2	2.2	17.0	34.7	2.2	32.5
Brickmasons, Stone & Tile Setters	17.1	0.8	16.3	6.1	0.4	5.7	11.0	0.4	10.6
Electricians	34.5	9.4	25.1	12.5	4.7	7.8	22.0	4.7	17.3
Painters & Paperhangers	42.1	1.4	40.7	14.9	0.7	14.2	27.2	0.7	26.5
Plumbers & Pipefitters	34.1	6.9	27.2	12.2	3.4	8.8	21.9	3.5	18.4
Structural Metalworkers	4.9	1.8	3.1	1.8	0.9	0.9	3.1	0.9	2.2
Others	20.3	0.4	19.9	7.2	0.2	7.0	13.1	0.2	12.9
Metalworking Craftsmen –	92.1	79.8	12.3	38.4	35.8	2.6	53.7	44.0	9.7
Boilermakers	1.7	1.1	0.6	0.7	0.5	0.2	1.0	0.6	0.4
Millwrights	2.7	2.0	0.7	1.1	0.9	0.2	1.6	1.1	0.5
Sheetmetal Workers	11.1	7.4	3.7	4.6	3.3	1.3	6.5	4.1	2.4
Toolmakers	9.6	7.8	1.8	4.0	3.5	0.5	5.6	4.3	1.3
Others	67.0	61.5	5.5	28.0	27.6	0.4	39.0	33.9	5.1
Mechanics & Repairmen –	286.8	72.7	214.1	96.5	26.5	70.0	190.3	46.2	144.1
Airplane Mechanics & Repairmen	16.3	1.6	14.7	4.8	0.6	4.2	11.5	1.0	10.5
Motor Vehicle Mechanics	64.5	2.5	62.0	22.4	0.9	21.5	42.1	1.6	40.5
Radio & TV Repairmen	13.7	1.4	12.3	4.6	0.5	4.1	9.1	0.9	8.2
Others	192.3	67.2	125.1	64.7	24.5	40.2	127.6	42.7	84.9
Printing Trades	46.8	40.9	5.9	12.6	10.1	2.5	34.2	30.8	3.4
Other Craftsmen and Related Workmen	303.0	133.3	169.7	94.5	60.5	34.0	208.5	72.8	135.7

The Supply of Managerial and Administrative Skills,  
1970 (Thousands)

About 771,000 persons in this Area are classified as managers, officials and proprietors. While this classification goes considerably beyond what is normally regarded as executive talent, it, nonetheless, embraces the entire category of functions requiring the application of leadership, managerial and supervisory skills.

Historically, this occupational group has accounted for 10 to 11 per cent of total employment, in the Area and in the Nation, as internal shifts have offset each other. For example, the number of small owner-operated retail establishments has declined and these have been replaced by large chain stores where the manager supervises more employees. On the other hand, the number of managers in manufacturing, finance and insurance has increased.

	Metropolitan Area			New Jersey Sector			New York Sector		
	Employed in:			Employed in:			Employed in:		
	Total	Manu- facturing	All Other Activities	Total	Manu- facturing	All Other Activities	Total	Manu- facturing	All Other Activities
Managers, Officials & Proprietors	770.8	131.9	638.9	220.9	44.6	176.3	549.9	87.3	462.6

The Supply of Service Workers and Laborer Skills,  
1970 (Thousands)

This group includes waiters, waitresses, household workers, janitors, cooks, policemen, hospital attendants, bakers, beauticians, porters, recreation attendants, and airline stewardesses. In the Metropolitan Area, there are more than one and

one-quarter million service workers and laborers. While personal and business service industries employ the majority of these workers, manufacturing accounts for 56,000 of these occupations.

	Metropolitan Area			New Jersey Sector			New York Sector		
	Employed in:			Employed in:			Employed in:		
	Total	Manu- facturing	All Other Activities	Total	Manu- facturing	All Other Activities	Total	Manu- facturing	All Other Activities
Service Workers	999.8	20.3	979.5	246.6	11.8	234.8	753.2	8.5	744.7
Laborers	259.6	35.7	223.9	82.0	22.9	59.1	177.6	12.8	164.8

The Supply of Operatives & Related Skills, 1970  
(Thousands)

The operative group consists of over 1.2 million Area residents. Generally considered semi-skilled, these workers usually operate a machine or

motor vehicle, assemble components or pack materials. More than 700,000 operatives work in manufacturing.

	Metropolitan Area			New Jersey Sector			New York Sector		
	Employed in:			Employed in:			Employed in:		
	Total	Manu- facturing	All Other Activities	Total	Manu- facturing	All Other Activities	Total	Manu- facturing	All Other Activities
Operatives & Related Workers	1,201.9	722.6	479.3	365.5	266.4	99.1	836.4	456.2	380.2
Drivers & Deliverymen —	272.2	42.0	230.2	78.9	15.5	63.4	193.3	26.5	166.8
Bus & Truck Drivers	159.1	24.7	134.4	46.1	9.1	37.0	113.0	15.6	97.4
Deliverymen & Taxi Drivers	113.1	17.3	95.8	32.8	6.4	26.4	80.3	10.9	69.4
Semi-Skilled Metalworkers —	81.8	72.2	9.6	37.8	35.7	2.1	44.0	36.5	7.5
Assemblers	33.7	32.0	1.7	15.6	15.5	0.1	18.1	16.5	1.6
Inspectors & Checkers	13.6	11.0	2.6	6.9	6.1	0.8	6.7	4.9	1.8
Welders & Cutters	19.4	16.1	3.3	9.0	8.1	0.9	10.4	8.0	2.4
Others	15.1	13.1	2.0	6.3	6.0	0.3	8.8	7.1	1.7
Semi-Skilled Textile Workers —	103.2	98.3	4.9	31.6	29.1	2.5	71.6	69.2	2.4
Sewers & Stitchers	98.9	94.7	4.2	30.3	28.1	2.2	68.6	66.6	2.0
Others	4.3	3.6	0.7	1.3	1.0	0.3	3.0	2.6	0.4
Other Operatives & Kindred Workers	744.7	510.1	234.6	217.2	186.1	31.1	527.5	324.0	203.5

The Supply of Clerical Skills, 1970 (Thousands)

The largest occupational group in the Metropolitan Area consists of clerical workers with 1.6 million persons employed. Secretaries, stenographers, typists, office machine operators, accounting clerks, bank tellers, cashiers, telephone operators, insurance adjusters, stock clerks, ticket agents, and shipping and receiving clerks are illustrative of categories making up this group.

While it is true that electronic data processing plays a large role in routine clerical operations in payroll accounting, bookkeeping, and inventory control, it has not appreciably reduced the demand for clerical personnel in the Metropolitan Area. In part, this arises from the combined growth of the headquarters function, and in part, from the proliferation of clerical operations in the conduct of business.

Here, too, the industrialist may draw upon skilled personnel with experience highly relevant to the industrialist's needs.

	Metropolitan Area			New Jersey Sector			New York Sector		
	Employed in:			Employed in:			Employed in:		
	Total	Manu- facturing	All Other Activities	Total	Manu- facturing	All Other Activities	Total	Manu- facturing	All Other Activities
Clerical & Kindred Workers —	1,613.3	282.4	1,330.9	357.6	91.3	266.3	1,255.7	191.1	1,064.6
Stenos, Typists & Secretaries	408.7	85.1	323.6	90.6	27.7	62.9	318.1	57.4	260.7
Office Machine Operators	85.7	22.6	63.1	19.0	5.3	13.7	66.7	17.3	49.4
Others	1,118.9	174.7	944.2	248.0	58.3	189.7	870.9	116.4	754.5

A Synopsis of Skills Employed by Manufacturing  
Industries in the Local Labor Markets, 1970  
(Thousands)

	New Jersey Sector				New York Sector		
	Bergen- Passaic	Essex- Morris- Union	Hudson	Middlesex- Somerset- Monmouth	New York City	Nassau- Suffolk	Westchester- Rockland
Total Manufacturing Jobs	181.6	259.4	118.1	127.2	871.3	163.1	94.8
Professional, Technical & Kindred Workers --	20.9	33.4	10.9	16.9	58.7	35.3	13.0
Engineers	7.7	11.1	4.1	5.8	10.5	11.6	2.7
Natural Scientists	1.0	2.4	0.4	1.1	2.4	0.5	1.6
Technicians & Specialists (Except Medical and Dental)	5.7	9.6	3.2	5.0	13.1	18.6	4.6
Others	6.5	10.3	3.2	5.0	32.7	4.6	4.1
Managers, Officials & Proprietors	11.9	17.2	6.8	8.6	66.4	10.7	10.2
Clerical and Kindred Workers --	25.1	34.7	13.5	17.9	157.4	17.4	16.4
Stenos, Typists & Secretaries	7.3	11.0	3.8	5.6	48.3	5.4	3.7
Office Machine Operators	1.4	2.1	0.8	1.1	13.8	2.0	1.5
Others	16.4	21.6	8.9	11.2	95.3	10.0	11.2
Sales Workers	6.4	8.5	3.3	3.9	47.4	7.6	4.8
Craftsmen & Kindred Workers --	40.4	55.3	21.7	28.0	152.4	39.6	14.4
Construction Craftsmen	3.1	4.4	2.2	2.7	8.5	3.1	1.0
Metalworking Craftsmen	9.4	14.7	5.0	6.8	29.4	10.4	4.2
Mechanics & Repairmen	7.4	9.9	3.8	5.3	33.6	10.2	2.4
Printing Trades	3.8	3.7	1.3	1.2	24.2	5.4	1.2
Others	16.7	22.6	9.4	12.0	56.7	10.5	5.6
Operatives & Kindred Workers --	67.8	97.6	56.4	44.6	371.7	50.4	34.1
Semi-Skilled Metalworkers	9.1	15.0	5.2	6.5	21.2	9.5	5.8
Semi-Skilled Textile Workers	9.7	6.3	8.7	4.4	60.9	5.6	2.7
Others	49.0	76.3	42.5	33.7	289.6	35.3	25.6
Service Workers and Laborers	9.1	12.7	5.5	7.3	17.3	2.1	1.9

The labor force is expected to grow almost 7 per cent by 1975. The New York sector should show a 5 per cent gain, while the increase expected in New Jersey may be more rapid—over 9 per cent. Overall, the net addition of almost one-half million persons to the Area-wide labor force is anticipated.

Much of the growth in the labor force will be in the 20 to 34 age group. The 20 to 24 age category should gain about 13 per cent, while the 25 to 34 age group is expected to add 14 per cent. No large increases are expected in the under twenty age category, due to more schooling, or in the over 65 age category, due to the prevailing trend of earlier retirements.

While the 35 to 44 age group is expected to decline, the extent of this decline is not anticipated to be as large in the Area as in the Nation. Continuing immigration of labor from the rest of the Nation and from abroad will offset local declines. It is expected that the traditional pattern of immigration will bring into the Area the highest and the lowest skills in the occupational spectrum. Immigration is expected to continue into the 1970's, but probably at a slower rate from that observed in the 1950's and 1960's.

Women will contribute rather heavily to the growth of the Metropolitan Area labor force in the 1970's. Entry of women into the labor force will be especially pronounced in New York City where almost 50,000 will be added to payrolls by 1975.

The educational level of all groups in the labor force will be higher by 1975 than at present. Young people are expected to stay in school longer, with an increasing percentage finishing high school and continuing on to college. By 1975, over 59 per cent of the population will have completed four years of high school, in contrast to 49 per cent in 1965. Similarly, the percentage of the population expected to complete four or more years of college is expected to rise from 9.5 per cent in 1965 to almost 12 per cent in 1975. At the high school level, the graduation rate of men and women is similar, while a greater percentage of men are expected to complete college.

The proportion of people with at least some college experience is approximately 3 to 4 percentage points higher in the Metropolitan Area than in the United States as a whole. The educational system here will continue to provide training to maintain this educational advantage and meet the demand for advanced training.

The foregoing is broadly descriptive of the labor situation at the time this Guide was prepared. For detailed information and referral services, the reader should contact:

Bergen County	11 Grand Avenue Englewood, New Jersey 07631 575 Main Street Hackensack, New Jersey 07601 32 Franklin Avenue Ridgewood, New Jersey 07450
Essex County	601 Broad Street Newark, New Jersey 07102
Hudson County	87 Newkirk Street Jersey City, New Jersey 07306
Middlesex County	13 N. Fourth Avenue Highland Park, New Jersey 08904 347 Maple Street Perth Amboy, New Jersey 08861
Monmouth County	500 Summerfield Avenue Asbury Park, New Jersey 07713 6 Throckmorton Street Freehold, New Jersey 07728 48 East Front Street Red Bank, New Jersey 07701
Morris County	10 South Morris Street Dover, New Jersey 07801 5 Schuyler Place P.O. Box 29 Morristown, New Jersey 07960
Passaic County	372 Broadway Paterson, New Jersey 07505
Somerset County	275 East Main Street Somerville, New Jersey 08876
Union County	1115 East Jersey Street Elizabeth, New Jersey 07201 147 North Avenue Plainfield, New Jersey 07060

Headquarters Office:	370 Seventh Avenue New York, New York 10001	Office Personnel Placement Center:	Manhattan 575 Lexington Avenue New York, New York 10022
Employment Service Offices:	Bronx 358 E. 149th Street Bronx, New York 10455		Brooklyn 175 Remsen Street Brooklyn, New York 11201
	Brooklyn Stuyvesant Center 550 Nostrand Avenue Brooklyn, New York 11216		Queens 42-15 Crescent Street Long Island City, New York 11101
	Manhattan Harlem State Employment Center 132 W. 125th Street New York, New York 10027	Professional and Technical:	444 Madison Avenue New York, New York 10022
	Queens Flushing Branch 42-09 Main Street Flushing, New York 11355	Hospital & Building Maintenance:	Manhattan 259 W. 54th Street New York, New York 10019
	Jamaica Branch 147-10 90th Avenue Jamaica, New York 11435		Brooklyn 250 Schermerhorn Street Brooklyn, New York 11201
	Staten Island 25 Hyatt Street St. George, S. I., N. Y. 10301	Sales & Merchandising:	Manhattan 16 E. 42nd Street New York, New York 10017
Specialized Offices:	Apparel Industries—Manhattan 238 W. 35th Street New York, New York 10001		Brooklyn 175 Remsen Street Brooklyn, New York 11201
	Apparel Industries—Brooklyn 58 Bond Street Brooklyn, New York 11217	Shipbuilding Trades:	Brooklyn 250 Schermerhorn Street Brooklyn, New York 11201
Industrial Building Construction:	Manhattan 255 W. 54th Street New York, New York 10019		
	Brooklyn 250 Schermerhorn Street Brooklyn, New York 11201		
	Queens 42-15 Crescent Street Long Island City, New York 11101		
Nurse & Medical:	444 Madison Avenue New York, New York 10022		

Nassau County	565 Willow Avenue Cedarhurst, New York 11516
	84 North Main Street Freeport, New York 11520
	25 Glen Cove Road Glen Cove, New York 11542
	330 Great Neck Road Great Neck, New York 11020
	247 Old Country Road Hicksville, New York 11801
	344 Fulton Avenue Hempstead, New York 11550
	Rockland County
Suffolk County	25 Depot Road Huntington Station, New York 11746
	293 East Main Street Patchogue, New York 11772
	945 West Main Street Riverhead, New York 11901
	Main Street Sag Harbor, New York 11963
	1730 Union Boulevard Bay Shore, New York 11706
Westchester County	145 North 5th Avenue Mount Vernon, New York 10550
	578 Main Street New Rochelle, New York 10801
	418 North Division Street Peekskill, New York 10566
	25 South Main Street Port Chester, New York 10573
	5 Prospect Avenue White Plains, New York 10605
	70 Ashburton Avenue Yonkers, New York 10701





## Education

Quality education from the primary grades to the university level is available throughout the New York-Northeastern New Jersey Metropolitan Area. While colleges and universities are regarded as the capstone of the Area's educational system, grade, high school and vocational instruction are vital parts of an educational complex. These schools have demonstrated ability to develop the intermediate as well as the highest skills.

The richness of part-time, evening and continuing education programs in professional, scientific and technical fields is outstanding. Utilized by a large part of the working population, these programs not only provide opportunities for employed personnel to keep abreast of developments, but also represent an important source of trained, work-experienced personnel.

The size of the Area's educational system, particularly at the collegiate level, also provides a large pool of scientific and professional manpower available for consultative employment. On the other hand, the numerous research and development activities of manufacturers in the Area, as well as its large number of technical service organizations, provide part-time faculty for many educational institutions. In the future, such educational instrumentalities will play an even greater role in shaping the labor force of the Metropolitan Area.

## Public and Private Education in New York-Northeastern New Jersey

	Elementary and Intermediate			Secondary		
	Schools	Teachers (000's)	Pupils (000's)	Schools	Teachers (000's)	Pupils (000's)
Area Total	3,959	134.8	2,640.2	785	53.8	1,008.5
New Jersey Sector --	1,634	37.0	827.0	372	17.9	390.2
Bergen	301	6.5	140.0	71	3.7	74.8
Essex	259	6.3	143.1	67	2.8	68.0
Hudson	148	3.4	94.4	32	1.7	33.0
Middlesex	199	4.8	99.9	47	2.0	52.4
Monmouth	163	3.6	85.0	32	1.8	37.6
Morris	167	3.3	72.4	30	1.7	28.0
Passaic	150	3.3	76.6	30	1.4	30.2
Somerset	82	1.6	36.7	15	1.0	16.7
Union	165	4.2	78.9	48	1.8	49.4
New York Sector --	2,325	97.8	1,813.2	413	35.9	618.3
New York City --	1,196	57.3	1,116.7	198	18.6	349.0
Manhattan	227	8.8	162.8	50	3.4	58.8
Bronx	226	12.4	236.5	38	3.7	65.4
Brooklyn	389	20.8	403.6	61	6.1	120.2
Queens	294	12.6	260.2	38	4.4	87.7
Richmond	60	2.7	53.6	11	1.0	16.9
Nassau	390	15.7	309.1	72	7.0	120.8
Suffolk	356	12.5	191.1	59	5.5	74.9
Rockland	84	2.7	46.6	13	0.9	14.5
Westchester	299	9.6	149.7	71	3.9	59.1

## High School Graduates in New York-Northeastern New Jersey

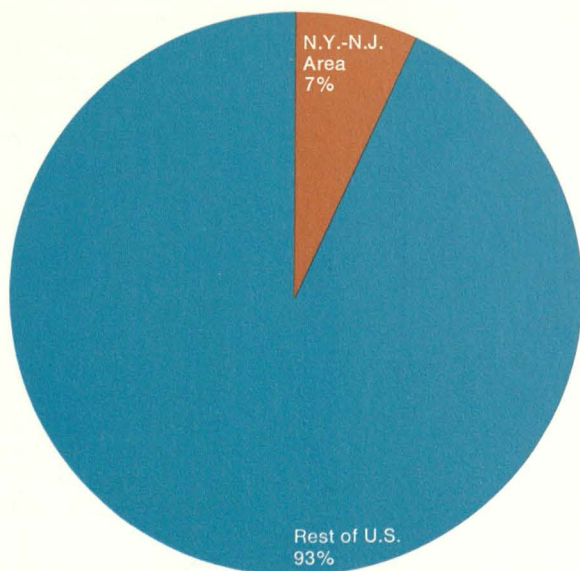
	All Graduates	Type of Diploma	
		Academic	Other
Area Total	205,712	134,056	71,656
New Jersey Sector --	71,031	49,219	21,812
Bergen	14,399	10,994	3,405
Essex	12,046	8,617	3,429
Hudson	7,040	3,687	3,353
Middlesex	8,275	5,220	3,055
Monmouth	6,278	4,249	2,029
Morris	5,470	3,952	1,518
Passaic	5,946	4,067	1,879
Somerset	2,963	2,171	792
Union	8,614	6,262	2,352
New York Sector --	134,681	84,837	49,844
New York City --	78,850	46,876	31,974
Manhattan	12,978	7,329	5,649
Bronx	15,418	9,956	5,462
Brooklyn	25,966	14,178	11,788
Queens	20,463	13,072	7,391
Richmond	4,025	2,341	1,684
Nassau	27,013	17,534	9,479
Suffolk	14,095	9,168	4,927
Rockland	2,667	2,033	634
Westchester	12,056	9,226	2,830

Education through the high school level is administered in the bi-state Area in 457 separate public school districts, supplemented by religious and private institutions. In total, there are 4,744 elementary and secondary public and private schools where 188,600 teachers offer instruction to 3.6 million pupils (see accompanying table).

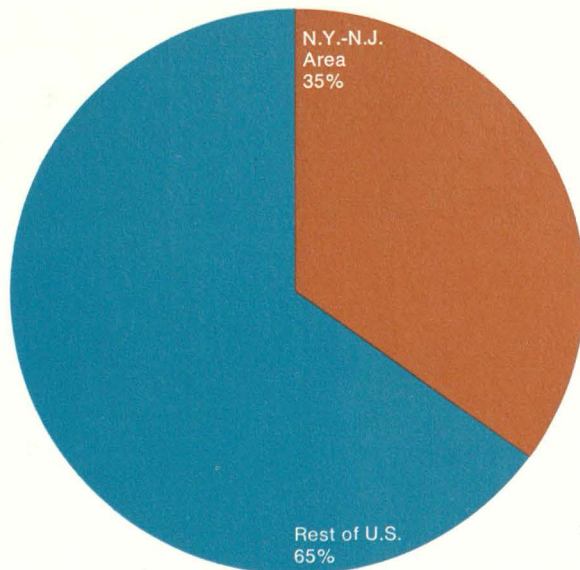
In June 1970, of the 205,700 pupils graduated from the Area's public and private high schools, 134,100 received academic diplomas (see accompanying table). While qualitative differences may be expected in such a large group of institutions, they, nevertheless, do offer sound preparation for continued education. On the basis of past experience, almost 70 per cent of the Metropolitan Area's high school graduates go on to college, a rate in excess of the national average of 60 per cent.

Graph 24  
Metropolitan Area Students Lead in Westinghouse  
Science Talent Search, 1970

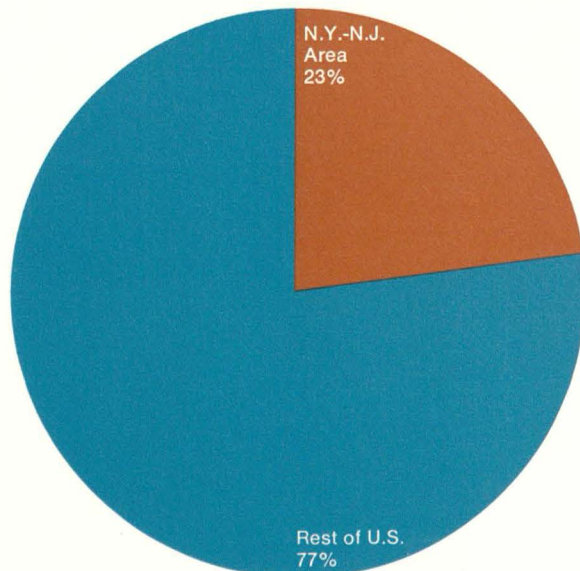
National Secondary  
Enrollment



Winner Awards



Honorable Mention



Woodrow Wilson Fellowship Awards by High School Origins, 1958-1966

Name and Location of School	Rank in Nation	Number of Woodrow Wilson Fellows
Bronx H.S. of Science, Bronx, N.Y.	1	151
Stuyvesant H.S., Manhattan, N.Y.	2	80
Erasmus Hall H.S., Brooklyn, N.Y.	3	58
H.S. of Music & Art, Manhattan, N.Y.	5	50
Regis H.S., Manhattan, N.Y.	7	43
Forest Hills H.S., Queens, N.Y.	8	42
Hunter College H.S., Bronx, N.Y.	10	39
Jamaica H.S., Queens, N.Y.	10	39
Great Neck North H.S., Nassau, N.Y.	13	34
Midwood H.S., Brooklyn, N.Y.	15	33
New Rochelle H.S., Westchester, N.Y.	20	26
Scarsdale H.S., Westchester, N.Y.	23	25
Fieldston School, Bronx, N.Y.	24	24
Bayside H.S., Queens, N.Y.	26	23
James Madison H.S., Brooklyn, N.Y.	27	22
Brooklyn Technical H.S., Brooklyn, N.Y.	29	21
Abraham Lincoln H.S., Brooklyn, N.Y.	44	17
Horace Mann School, Bronx, N.Y.	44	17

Total 744

50 Top High Schools in U.S. 1,536

48.4 per cent produced by Metropolitan Area High Schools

The quality of these educational programs at the secondary level is reflected in the many awards and scholarships received by students here compared with students in the Nation as a whole. In the Westinghouse Science Talent Search, a *nationwide* competitive scholarship program at the high school level with grants given to the highest scoring pupils without regard to geographic location, the Metropolitan Area in 1970 won 35 per cent of the scholarships and 23 per cent of the honorable mention awards.

In the National Merit Scholarship competition, awards to high school seniors are allocated to the states in proportion to their population and, within states, to the highest scoring pupils. The qualifying score a pupil must achieve to win a scholarship in his state is indicative of relative quality. In the Nation, the qualifying scores in 1970 ranged from 133 to 143. The qualifying score for New Jersey was 141, while that of New York State was 143. Metropolitan Area residents won 229 scholarships, or 65 per cent of the total of 355 allocated to the two States.

The Woodrow Wilson Foundation has surveyed the high school origins of students selected to receive its fellowships, which are awarded throughout the Nation to college seniors who are prospective college teachers. Of the 50 most productive schools in the 1958-1966 period, eighteen were found to be in the Metropolitan Area (see Table on opposite page).

Quality non-academic education is also readily available throughout the Metropolitan Area. Each of the school districts administers programs of training in business, technical and vocational skills.

In addition to the many high schools which offer programs in one or more of these fields, there are 84 special vocational high schools where students are trained to fill the Area's immediate employment needs. Vocational training programs in each of the Area's eighteen counties cover distribution and marketing, engineering and other science technologies, trade and industrial skills, office and secretarial skills, and the health and home economics field.

These vocational training programs represent a substantial source of manpower in the Metropolitan Area. In June 1970, almost 72,000 youths were graduated from high school with commercial, general, technical or vocational diplomas. A listing of vocational high schools located in the Metropolitan Area is provided. These may be contacted for further information.

Bergen	Bergen County Area Vocational-Technical School, Hackensack, New Jersey 07601, with a school also located at Wood-Ridge, New Jersey 07075
Essex	Coordinating Agency for all programs: Essex County Vocational-Technical High School, East Orange, New Jersey 07017, with schools located at Bloomfield, New Jersey 07003, Irvington, New Jersey 07111, Newark, New Jersey 07107 (Boys), and Newark, New Jersey 07107 (Girls) New Jersey Skills Center Area Vocational-Technical School, Newark, New Jersey 07107
Hudson	Bayonne Area Vocational-Technical School, Bayonne, New Jersey 07002 Hudson County Area Vocational-Technical School, Jersey City, New Jersey 07306
Middlesex	Coordinating Agency for all programs: Middlesex County Area Vocational-Technical Schools, East Brunswick, New Jersey 08816, with schools located at East Brunswick, New Jersey 08816, New Brunswick, New Jersey 08901, Perth Amboy, New Jersey 08861, and Woodbridge, New Jersey 07095
Monmouth	Coordinating Agency for all programs: Monmouth County Area Vocational-Technical Schools, Freehold, New Jersey 07728, with schools located at Allentown, New Jersey 08501, Asbury Park, New Jersey 07712, Hazlet, New Jersey 07730, Keyport, New Jersey 07735, Long Branch, New Jersey 07740, Matawan, New Jersey 07747, Middletown, New Jersey 07748, Neptune, New Jersey 07753, and Wall Township, New Jersey 07719
Morris	Morris County Area Vocational-Technical School, Denville, New Jersey 07834 Morris Hills Regional Area Vocational-Technical School, Rockaway, New Jersey 07866
Passaic	Coordinating Agency for all programs: Passaic County Area Vocational-Technical School, Wayne, New Jersey 07470

Somerset	Somerset County Area Vocational-Technical School, Somerville, New Jersey 08876, with Schools 1, 2 and Annex located in Raritan, New Jersey 08869, and School 3 in Somerville, New Jersey 08776
Union	Linden Area Vocational-Technical School, Linden, New Jersey 07036 Thomas A. Edison Area Vocational-Technical School, Elizabeth, New Jersey 07202 Union County Area Vocational-Technical School, Scotch Plains, New Jersey 07076 Union County Area Regional Vocational-Technical School, Springfield, New Jersey 07081, with the following schools: Jonathan Dayton Regional High School, Springfield, New Jersey 07081, Arthur L. Johnson Regional High School, Clark, New Jersey 07066, and David Brearley Regional High School, Kenilworth, New Jersey 07033
Bronx	Alfred E. Smith High School, Bronx, New York 10451 Bronx High School of Science, Bronx, New York 10468 Grace H. Dodge Vocational High School, Bronx, New York 10458 Jane Addams Vocational High School, Bronx, New York 10456 Samuel Gompers Vocational-Technical High School, Bronx, New York 10455
Brooklyn	Alexander Hamilton Vocational-Technical High School, Brooklyn, New York 11213 Automotive School and Annex, Brooklyn, New York 11222 Brooklyn Adult Training School, Brooklyn, New York 11216 Brooklyn Technical High School, Brooklyn, New York 11217 Clara Barton Vocational High School, Brooklyn, New York 11225 East New York Vocational-Technical High School, Brooklyn, New York 11208 Eli Whitney Vocational High School, Brooklyn, New York 11211

	George Westinghouse Vocational-Technical High School, Brooklyn, New York 11201	Richmond	Ralph R. McKee Vocational High School, Staten Island, New York 10301
	Sarah J. Hale Vocational High School, Brooklyn, New York 11217	Nassau	County Center for Occupational Education, Westbury, New York 11590
	William E. Grady Vocational-Technical High School, Brooklyn, New York 11235		Northeast Nassau Area Occupational Center, Westbury, New York 11590
	William H. Maxwell Vocational High School, Brooklyn, New York 11207		Southeast Nassau Area Occupational Center, North Bellmore, New York 11710
	Williamsburg Adult Training Center, Brooklyn, New York 11206		Southwest Nassau Area Occupational Center, Freeport, New York 11520
Manhattan	Central Commercial High School, New York, New York 10017	Suffolk	Suffolk County Board of Cooperative Educational Services #1, Riverhead, New York 11901
	Chelsea Vocational High School, New York, New York 10013		Suffolk County Board of Cooperative Educational Services #2, Patchogue, New York 11772
	Charles Evans Hughes High School, New York, New York 10011		Suffolk County Board of Cooperative Educational Services #3, Huntington, New York 11743
	Fashion Institute of Technology, New York, New York 10011	Rockland	Coordinating Agency for all programs: Center of Occupational Education, West Nyack, New York 10994
	Food & Maritime Trades Vocational High School, New York, New York 10011	Westchester	Mid-Westchester Center of Occupational Education, Valhalla, New York 10595
	Mabel Dean Bacon Vocational High School, New York, New York 10010		Northern Westchester Technology and Education Center, Yorktown Heights, New York 10598
	Manhattan Vocational-Technical High School, New York, New York 10028		Southeastern Westchester Center, Mount Vernon, New York 10552
	Metropolitan Evening Trade, New York, New York 10038		Southwestern Center for Vocational-Technical Training, Yonkers, New York 10701
	Mid Manhattan Adult Training Center, New York, New York 10027		
	New York City Adult Training Center, New York, New York 10002		
	New York School of Printing, New York, New York 10019		
	Yorkville Vocational High School, New York, New York 10028		
Queens	Aviation Trades High School, Long Island City, New York 11101		
	Jamaica Vocational and Adult Training Center, Jamaica, New York 11432		
	Queens Vocational High School, Long Island City, New York 11101		
	Thomas A. Edison Vocational-Technical High School, Jamaica, New York 11432		
	Woodrow Wilson Vocational High School, Jamaica, New York 11434		

Additional information pertinent to vocational education may also be obtained by writing:

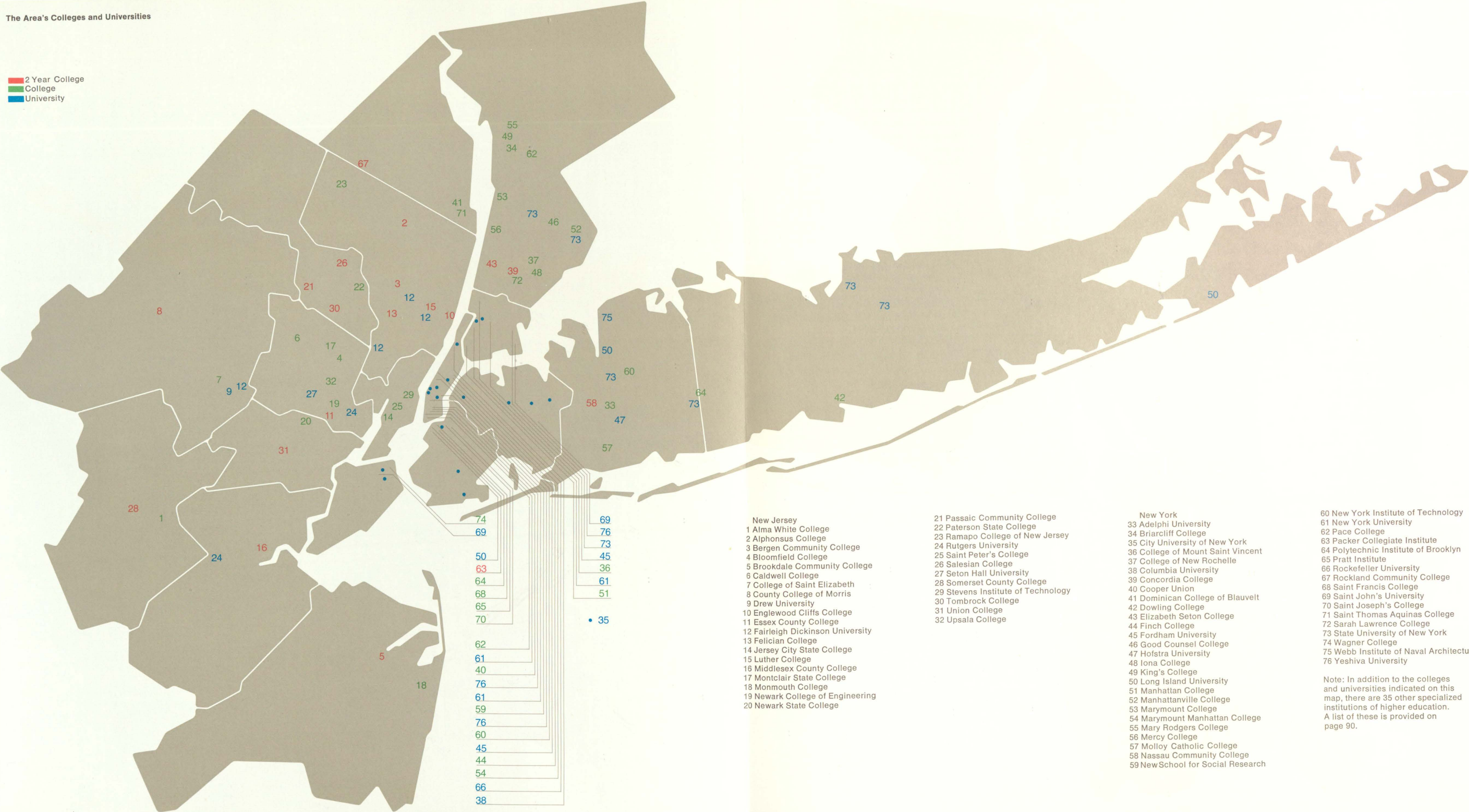
In New Jersey:  
Division of Vocational Education, New Jersey State Department of Education, 225 West State Street, Trenton, New Jersey 08625.

In New York:  
Division of Vocational Curriculum Development, New York State Department of Education, 112 State Street, Room 1322, Albany, New York 12224.

Bureau of Occupational Education, New York State Department of Education, Washington Avenue, Albany, New York 12224.

The Area's Colleges and Universities

- 2 Year College
- College
- University



- New Jersey**
- 1 Alma White College
  - 2 Alphonsus College
  - 3 Bergen Community College
  - 4 Bloomfield College
  - 5 Brookdale Community College
  - 6 Caldwell College
  - 7 College of Saint Elizabeth
  - 8 County College of Morris
  - 9 Drew University
  - 10 Englewood Cliffs College
  - 11 Essex County College
  - 12 Fairleigh Dickinson University
  - 13 Felician College
  - 14 Jersey City State College
  - 15 Luther College
  - 16 Middlesex County College
  - 17 Montclair State College
  - 18 Monmouth College
  - 19 Newark College of Engineering
  - 20 Newark State College

- 21 Passaic Community College
- 22 Paterson State College
- 23 Ramapo College of New Jersey
- 24 Rutgers University
- 25 Saint Peter's College
- 26 Salesian College
- 27 Seton Hall University
- 28 Somerset County College
- 29 Stevens Institute of Technology
- 30 Tombrock College
- 31 Union College
- 32 Upsala College

- New York**
- 33 Adelphi University
  - 34 Briarcliff College
  - 35 City University of New York
  - 36 College of Mount Saint Vincent
  - 37 College of New Rochelle
  - 38 Columbia University
  - 39 Concordia College
  - 40 Cooper Union
  - 41 Dominican College of Blauvelt
  - 42 Dowling College
  - 43 Elizabeth Seton College
  - 44 Finch College
  - 45 Fordham University
  - 46 Good Counsel College
  - 47 Hofstra University
  - 48 Iona College
  - 49 King's College
  - 50 Long Island University
  - 51 Manhattan College
  - 52 Manhattanville College
  - 53 Marymount College
  - 54 Marymount Manhattan College
  - 55 Mary Rodgers College
  - 56 Mercy College
  - 57 Molloy Catholic College
  - 58 Nassau Community College
  - 59 NewSchool for Social Research

- 60 New York Institute of Technology
- 61 New York University
- 62 Pace College
- 63 Packer Collegiate Institute
- 64 Polytechnic Institute of Brooklyn
- 65 Pratt Institute
- 66 Rockefeller University
- 67 Rockland Community College
- 68 Saint Francis College
- 69 Saint John's University
- 70 Saint Joseph's College
- 71 Saint Thomas Aquinas College
- 72 Sarah Lawrence College
- 73 State University of New York
- 74 Wagner College
- 75 Webb Institute of Naval Architecture
- 76 Yeshiva University

Note: In addition to the colleges and universities indicated on this map, there are 35 other specialized institutions of higher education. A list of these is provided on page 90.



## Higher Education Degrees Conferred, 1968

Type of Degree	Total Area	New Jersey Sector	New York Sector
Associate	12,559	1,880*	10,679
Bachelor's (4 years)	46,438	13,517	32,921
First Professional (6+ years)	2,966	543	2,423
Master's	18,676	3,797	14,879
Doctor's	1,902	291	1,611

The accompanying map depicts the locations of the Metropolitan Area's 151 college and university campuses, whose enrollment in 1969 totalled 303,000 full-time day students and 240,000 evening students. In graduate programs, evening enrollment makes up more than 70 per cent of the total, compared to less than 50 per cent nationally. The majority of evening students are employed in full-time career positions. In 1969, the bi-state Area's institutions conferred almost 83,000 degrees, of which 46,000 were Bachelor's, 19,000 Master's, and 2,000 were Doctorates.

The name and address of each school, its accreditation and programs of study are listed in the table contained in the following pages. The programs of study covered in the table are those deemed to be of greatest interest to business and industry. Indications are provided about the level of instruction, as well as the availability of evening classes, internships and continuing education programs for business and industry management. Accreditation by the Middle States Association of Colleges and Secondary Schools, Commission on Higher Education is an appraisal of the entire institution. Professional and special programs are also accredited by one or more of the professional associations when a program meets professional standards.

Separately listed are schools specializing in such professional fields as medicine, dentistry, pharmacology, law, music, fine arts, and technology.

\*The number of Associate degrees granted in Northeastern New Jersey is expected to increase sharply in the near future due to the recent opening of the five new two-year community colleges: Bergen Community College (1968), Brookdale Community College (1969), Essex County College (1968), County College of Morris (1968), Somerset County College (1968). These institutions have a current combined enrollment of over 6,200 full-time and 3,500 part-time students.

Selected Curricular Offerings

College or University	Recognition by Middle States Association	Architecture	Business Administration	Computer Sciences	Engineering	Mathematics	Biological Sciences	Liberal Arts	Physical Sciences	Social Sciences	Education
<b>Bergen County</b>											
Alphonsus College, Woodcliff Lake, New Jersey 07675	Y						Ae	Ae	A		Ae
Bergen Community College, Paramus, New Jersey 07652	Y		Ae*	Ae*	Ae	Ae	Ae	Ae	Ae	Ae	Ae
Englewood Cliffs College, Englewood Cliffs, New Jersey 07632			Ae					Ae			Ae
<b>Fairleigh Dickinson University</b>											
Main Campus, Rutherford, New Jersey 07070	X		Be, Me			Be	Be, Me	Be, Me	Be, Me	Be, Me	Be, De, c
Teaneck Campus, Teaneck, New Jersey 07666	X		Be, Me		Be, Me	Be, Me	Be, Me	Be, Me	Be, Me	Be, Me	Be, Me, c
Edward Williams College, Hackensack, New Jersey 07601	Z							Ae			
Felician College, Lodi, New Jersey 07644						A	A	A	A	A	B, c
Luther College, Teaneck, New Jersey 07666								A			
Ramapo College of New Jersey, Mahwah, New Jersey 07430	Z					B	B	B	B	B	c
<b>Essex County</b>											
Bloomfield College, Bloomfield, New Jersey 07003	X		Be			B	B	Be	B	Be	B, c
Caldwell College, Caldwell, New Jersey 07006	X		B			B	B	Be	B	Be	Be, c
Essex County College, Newark, New Jersey 07102	Z	Ae	Ae	Ae	Ae	Ae	Ae	Ae	Ae	Ae	Ae
Montclair State College, Upper Montclair, New Jersey 07043	X					Be, Me	Be, Me	Be, Me	Be, Me	Be, Me	Be, Me, ce*
Newark College of Engineering, Newark, New Jersey 07102	X				Be, Me, De, ep*						
Rutgers University Newark Campus, Newark, New Jersey 07102	X		Be, Me*			Be	B	Be	Be*	Be	Be, ce
Seton Hall University, South Orange, New Jersey 07079	X		Be, Me			B, Me	B, Me	B, Me	B, Me, De*	B, Me	Be, Me, c
Upsala College, East Orange, New Jersey 07019	X		Be, ep			Be	Be	Be	Be	Be	ce
<b>Hudson County</b>											
Jersey City State College, Jersey City, New Jersey 07305	X					B	B	B	B	B, Me	Be, Me, ce*
Saint Peter's College, Jersey City, New Jersey 07306	X		Be, ep			Be	B	Be	B*	Be	ce
Stevens Institute of Technology, Hoboken, New Jersey 07030	X			Me, De	Be, Me, D, ep*	Me, De			Me, De		

Legend  
 Status of Middle States Accreditation  
 X — Fully accredited  
 Y — Full accreditation pending  
 Z — Candidate for provisional accreditation  
 Accreditation by Professional Associations  
 \* — Program meets professional standards

Curricular Offering  
 A — Associate Degree  
 B — Bachelor Degree  
 M — Masters Degree  
 D — Doctorate Degree  
 c — Professional Certificate  
 e — Evening Program  
 ep — Executive Program for Continuing Education  
 co — Cooperative Work/Study Program

SUNY—  
 Community colleges under the program of State University of New York

Selected Curricular Offerings

College or University	Recognition by Middle States Association	Architecture	Business Administration	Computer Sciences	Engineering	Mathematics	Biological Sciences	Liberal Arts	Physical Sciences	Social Sciences	Education	Nursing
<b>Middlesex County</b>												
Middlesex County College, Edison, New Jersey 08817	X		Ae	Ae	Ae		Ae	Ae	Ae			A*
Rutgers University New Brunswick Campus, New Brunswick, New Jersey 08903	X	B	Be, Me, De	Be, Me, De	Be, Me, De	Be, Me, De	Be, Me, De	Be, Me, De	Be, Me, De	Be, Me, De	Be, Me, De	
<b>Monmouth County</b>												
Brookdale Community College, Lincroft, New Jersey 07738	Y		A	A	A	A	A	A	A	A	A	A
Monmouth College, West Long Branch, New Jersey 07764	X		Ae, Be	B	Ae, Be, Me*	Ae, Be	A, B	Ae, Be	Ae, Be	Ae, Be, Me	Ae, Be, Me, ce	B
<b>Morris County</b>												
College of Saint Elizabeth, Convent Station, New Jersey 07961	X		B			B	B	B	B	B	B, c	
County College of Morris, Dover, New Jersey 07801	Y		Ae	Ae	A	Ae	Ae	Ae	A*	Ae	A	A
Drew University, Madison, New Jersey 07940	X					B	B	B, M, D	B	B, M		
Fairleigh Dickinson University Florham-Madison Campus, Madison, New Jersey 07940	X		Be, Me			Be, Me	Be, Me	Be, Me	Be, Me	Be, Me	B, Me, c	
<b>Passaic County</b>												
Passaic County Community College, Paterson, New Jersey 07505	Z		Ae					Ae				Ae
Paterson State College, Wayne, New Jersey 07470	X					B	B, Me	Be, Me	B	Be, Me	Be, Me, c*	Be*
Salesian College, North Haledon, New Jersey 07508								A			A	
Tombrock College, West Paterson, New Jersey 07424	Y							Ae			Ae	
<b>Somerset County</b>												
Alma White College, Zarephath, New Jersey 08890						Be		Be			ce	
Somerset County College, Somerville, New Jersey 08876	Y		Ae	Ae	Ae	Ae	Ae	Ae	Ae			A
<b>Union County</b>												
Newark State College, Union, New Jersey 07083	X			B		B	B	Be	B	B	Be, Me, ce*	
Union College, Cranford, New Jersey 07016	X		Ae		Ae		Ae	Ae	Ae		ce	A
<b>Bronx County</b>												
<b>City University of New York</b>												
Bronx Community College, Bronx, New York 10468 (SUNY)	X		Ae	Ae	Ae*			Ae	Ae	Ae	Ae	A*
Hostos Community College, Bronx, New York 10451 (SUNY)	Z							A				A
Herbert M. Lehman College, Bronx, New York 10468	X		B			Be, Me	Be, Me	Be, Me	Be, Me*	Be, Me	Me, c	B
College of Mount Saint Vincent Bronx, New York 10471	X		B				B	B	B*	B	c	
Fordham University Rose Hill Campus, Bronx, New York 10458	X		Be*			B, M, D	B, M, D	Be	Be, M, D*	Be, Me, De		

Selected Curricular Offerings

College or University	Recognition by Middle States Association	Architecture	Business Administration	Computer Sciences	Engineering	Mathematics	Biological Sciences	Liberal Arts	Physical Sciences	Social Sciences	Education	Nursing
Bronx County (cont.)												
Manhattan College, Bronx, New York 10471	X		Ae, Be		B, M, ep*	B, M	B	B, M	B, M*	B, M	B, M	
New York University University Heights, Bronx, New York 10453	X				B, Me, De*	Be, Me, De	Be	Be	Be*	Be	c	
State University of New York Maritime College, Bronx, New York 10465	X	B	M, ep		B	B			B			
Yeshiva University Albert Einstein College of Medicine, Bronx, New York 10461							M, D					
Kings County												
City University of New York												
Brooklyn College, Brooklyn, New York 11210	X		Be			Be, Me	Be, Me	Be, Me	Be, Me*	Be, Me	Be, Me, c*	B
Medgar Evers College, Brooklyn, New York 11225	X		B				A	A	A	B	B	
Kingsborough Community College, Brooklyn, New York 11235 (SUNY)	X		Ae, co	Ae		Ae	Ae	Ae	Ae	Ae	A	A*
New York City Community College, Brooklyn, New York 11201 (SUNY)	X	Ae, co	Ae, co	Ae	Ae		Ae	Ae	Ae		Ae*	A
Long Island University Brooklyn Center, Brooklyn, New York 11201	X		Ae, Be, Me, co			Be	Ae, Be, Me	Ae, Be, Me	Ae, Be, Me*	Ae, Be, Me, De	Ae, Be, Me, c	B*
Packer Collegiate Institute, Brooklyn, New York 11201	X					A	A	A	A	A	A	
Polytechnic Institute of Brooklyn, Brooklyn, New York 11201	X		Me	Be, Me, De	Be, Me, De, ep*	Be, Me, De	B	Be, Me	Be, Me, De*	Be, Me		
Pratt Institute, Brooklyn, New York 11205	X	B, Me*		B, Me	B, Me, co*	B, Me		Ae, Be, Me*	B, Me		Me	
Saint Francis College, Brooklyn, New York 11201	X		Ae, Be	Ae		B	B	Ae, Be	B	Be	Ae, Be, c	
Saint Joseph's College, Brooklyn, New York 11205	X					B	B	B	B	B	c	
Manhattan County												
City University of New York												
Bernard Baruch College, New York, New York 10010	X		Ae, Be, Me, De, co*					Be		Be, Me	B, Me, c	
Borough of Manhattan Community College, New York, New York 10020 (SUNY)	X		Ae, co	Ae, co				Ae				A*
City College, New York, New York 10031	X	Be, Me*		Be, Me	Be, Me, ep*	Be, Me	Be, Me	Be, Me	Be, Me*	Be, Me	Be, Me, c	B
Graduate Center, New York, New York 10036	X		D		D	D	D	M, D	D	D	D	
Hunter College, New York, New York 10021	X		Be			Be, Me	Be, Me	Be, Me	Be, Me	Be, Me, co	Me, c*	B, M*
New York City Community College Voorhees Campus, New York, New York 10036 (SUNY)		Ae		Ae	Ae							

Legend  
 Status of Middle States Accreditation  
 X — Fully accredited  
 Y — Full accreditation pending  
 Z — Candidate for provisional accreditation  
 Accreditation by Professional Associations  
 \* — Program meets professional standards

Curricular Offering  
 A — Associate Degree  
 B — Bachelor Degree  
 M — Masters Degree  
 D — Doctorate Degree  
 c — Professional Certificate  
 e — Evening Program  
 ep — Executive Program for Continuing Education  
 co — Cooperative Work/Study Program

SUNY—  
 Community colleges under the program of State University of New York

Selected Curricular Offerings

College or University	Recognition by Middle States Association	Architecture	Business Administration	Computer Sciences	Engineering	Mathematics	Biological Sciences	Liberal Arts	Physical Sciences	Social Sciences	Education	Nursing
Manhattan County (cont.)												
Columbia University, New York, New York 10027	X	Be,Me, D*	M,D, ep*		B,M, D*	Be,M, D	M, D	Be, M,D	Be, M,D*	Be, M,D	Me, De,c	B, M*
Cooper Union, New York, New York 10003	X	B, co*			B,Me, D			B	B			
Finch College, New York New York 10021	X					A, B	A, B	Ae, Be	A, B	Ae,Be, co	B	
Fordham University Lincoln Center Campus, New York, New York 10023	Y		Me*			Be		Be		Be	Be, M, D,c	
Marymount Manhattan College, New York, New York 10021	X					B	B	Be	B	Be	c	
New School for Social Research, New York, New York 10011	X									Me, De		
New York Institute of Technology New York City Campus, New York, New York 10023	X	Ae, Be	Ae, Be,Me, co	Ae, Be, co			Ae, Be		Ae, Be			
New York University												
Graduate Business Center, New York, New York 10006	X		Me,De, ep*									
Washington Square Center New York, New York 10003	X		Ae,Be, co*	Be,Me, De		B,Me, De	B,Me, De	Ae,B,Me, De	B,Me, De*	B,Me, De	B,Me, De,c*	M, De*
Pace College Main Campus, New York, New York 10038	X		Ae, Be,Me, ep	Ae, Be, co		B	A, B	Ae, Be	A, B	Be, Me	Be, Me, c	A
Rockefeller University, New York, New York 10021						D	D	D	D			
Yeshiva University												
Graduate Center, New York, New York 10003	X									Me, De	Me, De	
Main Center, New York, New York 10003	X					B,M, D	B	B	B,M, D	B, co	B,c	
Stern College for Women, New York, New York 10016	X					B	B,M, D	B	B	B	B	
Nassau County												
Adelphi University, Garden City, New York 11530	X		Be,Me, ep			Be,Me, De	Be, Me	Be,Me, ep	Be,Me, De*	Be,Me, De,ep	B,Me, ep,c	B,M, ep*
Hofstra University, Hempstead, New York 11550	X		Be, Me*	B	Be	Be, Me	Be, Me	Be, Me	Be, Me	Be, Me	Be,Me, De,c*	
Long Island University C. W. Post Center, Greenvale, New York 11548	X		Be, Me*		Be	Be, Me	Be, Me	Be, Me	Be, Me*	Be, Me	Be, Me, c	
Molloy Catholic College, Rockville Centre, New York 11750	X					Be	Be	Be	B	Be	c	B*
Nassau Community College, Garden City, New York 11530 (SUNY)	X		Ae, co	Ae	Ae	Ae	Ae	Ae	Ae	Ae	Ae	A*
New York Institute of Technology Main Campus, Old Westbury, New York 11568	X	Ae, Be	Ae, Be, Me	Be	Ae, Be		Ae, Be	Be	Be	Be	c	
State University of New York												
Agricultural & Technical College at Farmingdale Farmingdale, New York 11735	X		Ae, ep	Ae	Ae*		Ae	Ae	Ae, ep		Ae	Ae*
Old Westbury Campus, Old Westbury, New York 11568	Z							B, co*				
Webb Institute of Naval Architecture, Glen Cove, New York 11542	X				B, co							

## Selected Curricular Offerings

College or University	Recognition by Middle States Association	Architecture	Business Administration	Computer Sciences	Engineering	Mathematics	Biological Sciences	Liberal Arts	Physical Sciences	Social Sciences	Education	Nursing
<b>Queens County</b>												
<b>City University of New York</b>												
Fiorello H. La Guardia Community College, Long Island City, New York 11101 (SUNY)	Z		A, co	A, co				A, co				
Queens College, Flushing, New York 11367	X			B		Be, Me	Be, Me	Be, Me	B, Me*	Be, Me	Be, Me, c*	
Queensboro Community College, Bayside, New York 11364 (SUNY)	X		Ae	Ae	Ae*			Ae				A
York College, Flushing, New York 11365	X					B	B	B	B	B	c	
Saint John's University Jamaica Campus, Jamaica, New York 11432	X		Ae, Be, Me, co*	B		B, Me	B, Me, De	Ae, Be, Me, De	B, Me, De*	B, Me, De	Ae, Be, Me, c	
<b>Richmond County</b>												
<b>City University of New York</b>												
Richmond College, Staten Island, New York 10301	X			B	B	B	B	B, M	B, M	B	Me, c	
Staten Island Community College, Staten Island, New York 10301 (SUNY)	X		Ae	Ae	Ae		Ae	Ae	Ae		Ae	A
Saint John's University Notre Dame College, Staten Island, New York 10301	X		B			B		B		B	B, c	
Wagner College, Staten Island, New York 10301	X		Be, Me			Be	Be	Be, Me	Be*		Be, Me, c	B*
<b>Rockland County</b>												
Dominican College of Blauvelt, Blauvelt, New York 10913	Y		Be			Be		Ae, Be		Be	c	
Rockland Community College, Suffern, New York 10901 (SUNY)	X		Ae		Ae	Ae	Ae	Ae	Ae	Ae	B	A*
Saint Thomas Aquinas College, Sparkill, New York 10976	Y		Be			Be	Be	Be	Be	Be	Be, c	

## Legend

Status of Middle States Accreditation

X — Fully accredited

Y — Full accreditation pending

Z — Candidate for provisional accreditation

Accreditation by Professional Associations

\* — Program meets professional standards

## Curricular Offering

A — Associate Degree

B — Bachelor Degree

M — Masters Degree

D — Doctorate Degree

c — Professional Certificate

e — Evening Program

ep — Executive Program for Continuing Education

co — Cooperative Work/Study Program

## SUNY—

Community colleges under the program of State University of New York

Selected Curricular Offerings

College or University	Recognition by Middle States Association	Architecture	Business Administration	Computer Sciences	Engineering	Mathematics	Biological Sciences	Liberal Arts	Physical Sciences	Social Sciences	Education	Nursing
<b>Suffolk County</b>												
Dowling College, Oakdale, New York 11769	Y		Be			Be	Be	Be	Be	Be	c	
Long Island University Southampton Center, Southampton, New York 11968	X		Be			Be	Be	Be	Be	Be	Be, c	
Polytechnic Institute of Brooklyn Long Island Graduate Center, Farmingdale, New York 11735	X		Me		Me, De,ep							
State University of New York Stony Brook Campus, Stony Brook, New York 11790	X			Be, Me,D, co	Be, Me,D, co*	Be, Me,D, co	Be, Me,D, co	Be, Me,D, co	Be, Me,D, co*	Be, Me,D, co	Be, c	B
Suffolk Community College, Selden, New York 11784 (SUNY)	X		Ae, co	Ae	Ae, co		A	Ae		Ae		Ae, ep*
<b>Westchester County</b>												
Briarcliff College, Briarcliff Manor, New York 10510	X						B, co	A,B, co		B, co	A, c	
College of New Rochelle, New Rochelle, New York 10801	X					B	B	B	B	B	B,Me, c	
Concordia College, Bronxville, New York 10708	X						A	A	A		A	
Elizabeth Seton College, Yonkers, New York 10701	X		Ae					Ae				
Good Counsel College, White Plains, New York 10603	X		Be, co			Be, co	Be, co	Be, co	Be, co	Be, co	Be, c	
Iona College, New Rochelle, New York 10801	X		Be, Me			B	B	Be	B	Be	Me, c	
King's College, Briarcliff Manor, New York 10510	X		B			B	B	B	B	B	B, c	A
Manhattanville College, Purchase, New York 10577	X					B	B	B	B	B	M, c	
Marymount College, Tarrytown, New York 10591	X					B	B	B	B	B	c	
Mary Rodgers College, Maryknoll, New York 10545	X							Be		Be	Be	
Mercy College, Dobbs Ferry, New York 10522	X					Be	Be, co	Be		B, co	c	
Pace College Westchester Campus, Pleasantville, New York 10570	X		Ae, Be,Me, co			B		Ae, B		B, c		A*
Sarah Lawrence College, Bronxville, New York 10708	X							B, M				
State University of New York Purchase Campus, Purchase, New York 10577	Z					B	B	B	B	B		
Westchester Community College, Valhalla, New York 10595 (SUNY)	X		Ae	Ae	Ae	Ae	Ae	Ae	Ae	Ae		

Specialized Institutions of Higher  
Education Include:

Bergen	Fairleigh Dickinson University School of Dentistry, Teaneck, New Jersey 07666	Manhattan	Bank Street College of Education, New York, New York 10027
Essex	The Berkeley School, East Orange, New Jersey 07017		City University of New York John Jay College of Criminal Justice, New York, New York 10010
	New Jersey College of Medicine and Dentistry Medical School, Newark, New Jersey 07103		Mount Sinai School of Medicine, New York, New York 10029
	Rutgers University Law School, Newark, New Jersey 07104 College of Pharmacy, Newark, New Jersey 07104		College of Insurance, New York, New York 10038
	Seton Hall University School of Law, Newark, New Jersey 07102		Columbia University Columbia Presbyterian Medical Center, New York, New York 10032
Hudson	New Jersey College of Medicine and Dentistry Dental School, Jersey City, New Jersey 07304		College of Pharmaceutical Sciences, New York, New York 10023
Middlesex	Rutgers University Medical School, New Brunswick, New Jersey 08903		Cornell University Medical College Center, New York, New York 10021
Bronx	Yeshiva University Albert Einstein College of Medicine, Bronx, New York 10461		The Juilliard School of Music, New York, New York 10023
Kings	St. John's University Law School, Brooklyn, New York 11201		M. J. Lewi College of Podiatry, New York, New York 10035
	Brooklyn Law School, Brooklyn, New York 11201		Manhattan School of Music, New York, New York 10027
	Long Island University Brooklyn College of Pharmacy, Brooklyn, New York 11216		Mannes College of Music, New York, New York 10021
	State University of New York Downstate Medical Center, Brooklyn, New York 11203		Mills College of Education, New York, New York 10011
Queens	Academy of Aeronautics, Flushing, New York 11371		New York Law School, New York, New York 10013
			New York Medical College, New York, New York 10029
			New York University Institute of Fine Arts, New York, New York 10021
			Medical Center, New York, New York 10016
			Dental Center, New York, New York 10010
			Parson's School of Design, New York, New York 10022
			RCA Institutes, New York, New York 10001
			State University of New York Fashion Institute of Technology, New York, New York 10001
		Nassau	Hofstra University Law School, Hempstead, New York 11550

There are 37 institutions offering engineering and technology programs, all approved and registered by the respective State Departments of Education. Twenty schools offer programs leading to Bachelor's or graduate engineering degrees, while twenty offer Associate degrees in engineering technology.

Fifteen of the Area's engineering colleges and five of the technology institutes have further voluntarily requested evaluation of their curricula by the Engineers' Council for Professional Development (ECPD). This prestigious group was formed by the major engineering societies to evaluate and accredit engineering and technology programs in the United States. It, along with twenty-one parent societies, is headquartered in Manhattan's United Engineering Center.

The accompanying table identifies the Area's engineering schools, curricula, and accreditation by ECPD. A listing of the other technology schools is provided on this and the following page.

New Jersey:	
Bergen Community College	Chemical Technology Engineering Science
Brookdale Community College	Automotive Technology Drafting and Design Technology Electronics Technology Instrumentation Technology
Essex County College	Architectural Design
Middlesex County College	Chemical Technology Civil Technology Electrical Technology Engineering Science Mechanical Technology
Monmouth College	Electrical Engineering
County College of Morris	Chemical Technology Electrical Technology Mechanical Technology
Somerset County College	Chemical Technology
Union College	Chemical Technology Civil Technology Engineering Science

New York:

Academy of Aeronautics	Aircraft Design Technology* Aircraft Electronics Technology* Aircraft Maintenance Technology* Airframe and Powerplant Technology*	State University of New York at Farmingdale	Aerospace Technology Air Conditioning Technology* Automotive Technology* Biological Technology Chemical Technology* Civil Technology* Construction Technology* Electrical Technology* Electro-Mechanical Technology Engineering Science Mechanical Technology*
City University of New York:	Bronx Community College Chemical Technology Electrical Technology* Engineering Science Mechanical Technology*	Staten Island Community College	Civil Technology Electrical Technology Electro-Mechanical Technology Mechanical Technology
	New York City Community College Architectural Design Automotive Technology Chemical Technology Construction Technology Design Drafting Technology Electrical Technology Electromechanical Technology Environmental Science Technology Mechanical Technology	Suffolk Community College	Civil Technology Electrical Technology Engineering Science Marine Technology Mechanical Technology
	Queensborough Community College Design Drafting Technology Electrical Technology* Mechanical Technology	Westchester Community College	Chemical Technology Civil Technology Electrical Technology Engineering Science Mechanical Technology
Nassau Community College	Civil Technology Engineering Science Industrial Engineering Industrial Technology Instrumentation Technology		
New York Institute of Technology	Architectural Technology Electrical Technology Environmental Technology Mechanical Technology		
RCA Institutes	Electronics Technology*		
Rockland Community College	Engineering Science		

\*Curriculum Accredited by ECPD.

## Selected Engineering Curricula

Schools	Aeronautical & Aerospace	Bio-Engineering	Chemical	Civil	Electrical	Electrical Science	Engineering Science	Environmental	Industrial	Materials	Mechanical	Mechanical Science	Metallurgical	Mining	Naval Architecture & Marine Engineering	Nuclear	Ocean
<b>New Jersey</b>																	
Fairleigh Dickinson University Teaneck Campus (Bergen)					*BG				*B		*BG						
Monmouth College (Monmouth)					*BG												
Newark College of Engineering (Essex)			*BG	*BG	*BG		BG		*BG		*BG						
Rutgers University (Middlesex)			BG	*BG	*BG				*BG		*BG	G					
Stevens Institute of Technology (Hudson)			G		G		*BG				G		G				G
<b>New York</b>																	
City University of New York																	
City College (Manhattan)			*BG	*BG	*BG		G				*BG						
Richmond College (Richmond)						B	B					B					
Columbia University (Manhattan)	BG	G	*BG	*BG	*BG		BG	BG	*BG		*BG	*BG	*BG	*BG	*BG	*BG	G
Cooper Union (Manhattan)			*BG	*BG	*BG		*B				*BG						
Hofstra University (Nassau)	B				B		*B		B			B					
Long Island University C. W. Post Center (Nassau)					B				B		B						
Manhattan College (Bronx)			*BG	*B	*B			**G			*B						
New York Institute of Technology (Nassau)	B				B				B		B						
New York University (Bronx)	*BG		*BG	*BG	*BG		BG		*BG		*BG		*BG			BG	BG
Polytechnic Institute of Brooklyn																	
Main Center (Brooklyn)	*BG	G	*BG	*BG	*BG						*BG		*BG				
Graduate Center (Suffolk)	G			G	G						G		G				
Pratt Institute (Brooklyn)			*B		*BG				B		*BG						
State University of New York																	
Maritime College (Nassau)						B									B	B	
Stony Brook (Suffolk)						G	*B			G		G					
Webb Institute of Naval Architecture (Nassau)															*BG		

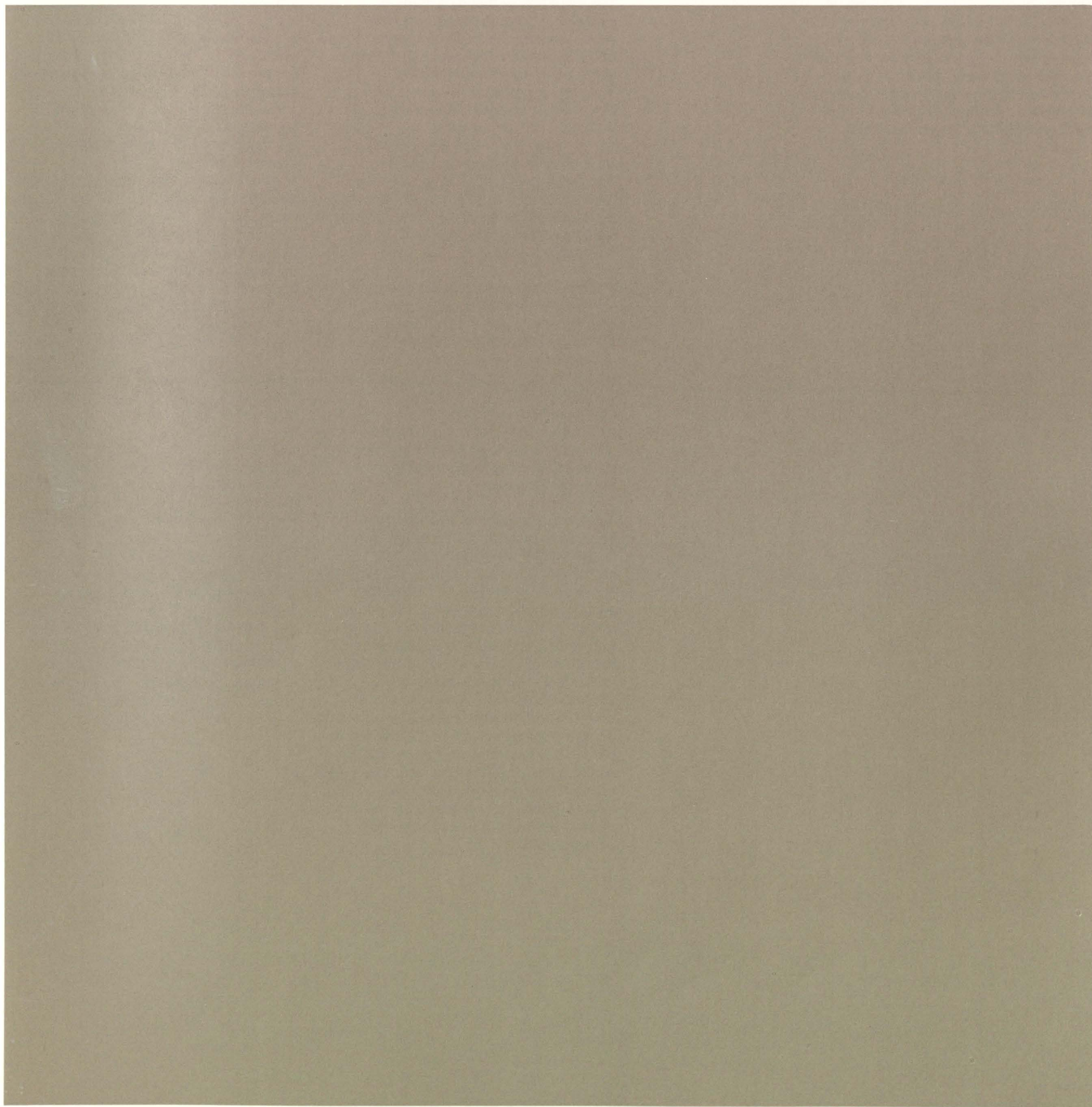
B — Bachelor's program

G — Graduate program

\* — Undergraduate curriculum accredited by ECPD.

\*\* — Graduate curriculum accredited by ECPD.





## Industrial Localities

The geographic patterns of industrial settlement in the New York-Northeastern New Jersey Metropolitan Area have been largely influenced by transportation routes and services. The fold-out map on the facing page depicts the location of industrial production and the major transportation routes and facilities.

The evolution of these patterns of settlement has been shaped by the successive appearance of various modes of transportation that perform the vital services of supply and distribution. Water transportation, barge as well as deep-water, shaped the first stage of industrial settlement along the frontage of the Upper New York Harbor, its bays and connecting channels. The rail network, in turn, focused upon the Harbor and, in addition, led to the development of finger-like projections of industrial activity into the land along the railroad lines.

The highway era, and its more recent variant, the limited-access freeway, has also focused upon the Harbor and its surroundings, thus reinforcing the basic pattern of settlement in those areas where all three modes of transportation converge. The highway networks have also opened much land hitherto unsuited to industrial development and, in so doing, have led to a substantial dispersal of manufacturing throughout the Metropolitan Area.

Air transportation has added a new dimension to industrial location. The freeway network gives all existing industrial districts good access to the three airports—Kennedy, La Guardia and Newark. The high-frequency direct air service to so many points available at these airports—the exact extent is described in Transportation Services—has aided importantly in restructuring the Metropolitan Area's industry. This restructuring has resulted in the growth of industries whose products are distributed in markets that are geographically wide-spread. Swift means of delivery and receipt have become, over the course of only two decades, an essential ingredient of success in a wide repertory of industries.

The role of general aviation in industrial location is fast becoming established here as elsewhere in the Nation. The Metropolitan Area is endowed with 33 general aviation airports whose value to industry has been recognized by private and public economic development agencies. Examples of this trend are found at Caldwell Airport in Essex County, Linden Airport in Union, Teterboro Airport in Bergen, McArthur and Republic Airports in Suffolk, White Plains Airport in Westchester, and Flushing Airport in Queens. Much planning is being done in relation to these and other airports. Extensive improvements, for example, are planned by New York City at Flushing Airport, which is adjacent to the College Point Industrial Park (see Space for Industry—Queens) and is only a few minutes from La Guardia. Expansion is also planned for Suffolk Airport in conjunction with a large industrial park.

In addition to the all-important effect of transportation, industrial settlement in the established industrial districts has been influenced to a considerable degree by the immediate availability of supporting services, (e.g., industrial suppliers, warehouses, trucking terminals), personal services, (e.g., banks, restaurants, service stations), and industrial laboratories. Suburban settlement, in contrast, has tended to attract those firms which are relatively self-sufficient in terms of in-plant cafeterias, employee parking, laboratories, warehousing and other essential services.

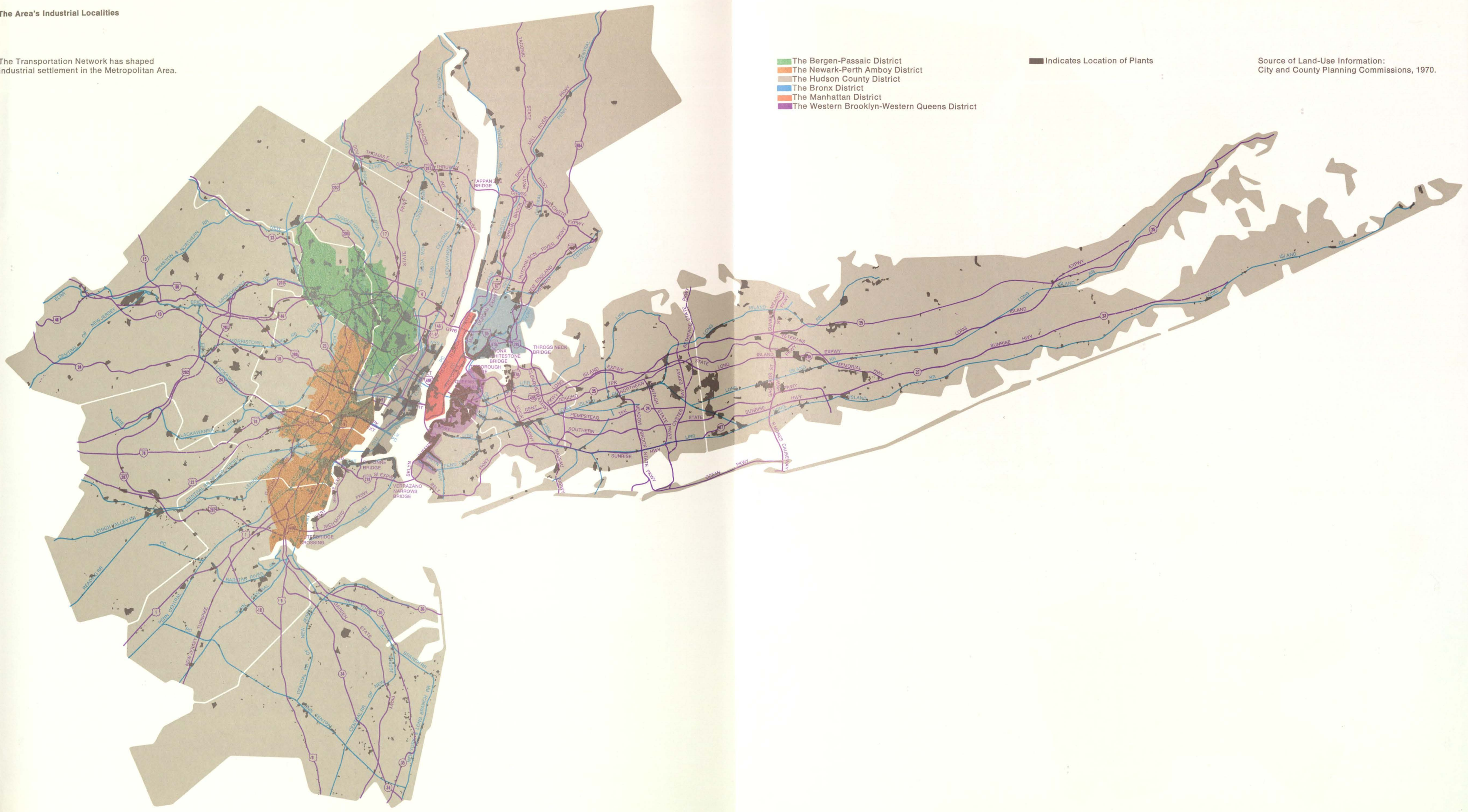
**The Area's Industrial Localities**

The Transportation Network has shaped industrial settlement in the Metropolitan Area.

- The Bergen-Passaic District
- The Newark-Perth Amboy District
- The Hudson County District
- The Bronx District
- The Manhattan District
- The Western Brooklyn-Western Queens District

■ Indicates Location of Plants

Source of Land-Use Information:  
City and County Planning Commissions, 1970.



The Area's Industrial Localities

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## Industrial Belts

Almost two-thirds of the Metropolitan Area's manufacturing is conducted in two broad industrialized belts lying in general proximity to the convergences of all modes of transportation. One is in New Jersey and the other is entirely within New York City.

In Northern New Jersey 66 per cent of industrial employment falls within the New Jersey Industrial Belt, an area of industrial settlement that stretches from the southern portions of Bergen and Passaic Counties as far south as Perth Amboy in Middlesex County. Within this belt, which is almost 34 miles long and 14 miles at its widest, three industrial districts may be identified: the Newark-Perth Amboy District (identified in Brown on the map), the Bergen-Passaic District (Green), and the Hudson County District (Dark Grey). The three districts, which contain 8,100 plants employing 438,700 persons, are the most important locales of industrial production in the New Jersey sector of the Metropolitan Area.

On the New York side, 63 per cent of manufacturing employment lies within the New York Industrial Belt, whose geographic dimensions stretch north-south almost 14 miles and more than 7 miles west to east at its widest. The New York Industrial Belt, which contains 24,250 plants with 658,700 employees, is composed of the Bronx District (Blue), the Manhattan District (Red), and the Western Brooklyn-Western Queens District (Light Purple).

Beyond the three major districts, New Jersey industrial settlement becomes more diffused. While important sub-clusters are apparent from an examination of the industrial localities map, the overall tenor of development retains an essentially suburban character and is composed of 3,900 plants employing 257,300 persons.

On Long Island, beyond the New York Industrial Belt, there is a long string of industrial settlement that stretches from central Brooklyn, through Queens, Nassau and into western Suffolk County, a distance of almost forty miles. These areas together contain 7,900 plants and 308,000 employees, and form the Long Island Industrial District.

Communities of industrial activity, some of considerable magnitude, are found in Rockland, Westchester and Staten Island. Together, these localities account for 1,700 plants and 95,000 employees.

The Leading Industries in the New York Sector of the Metropolitan Area

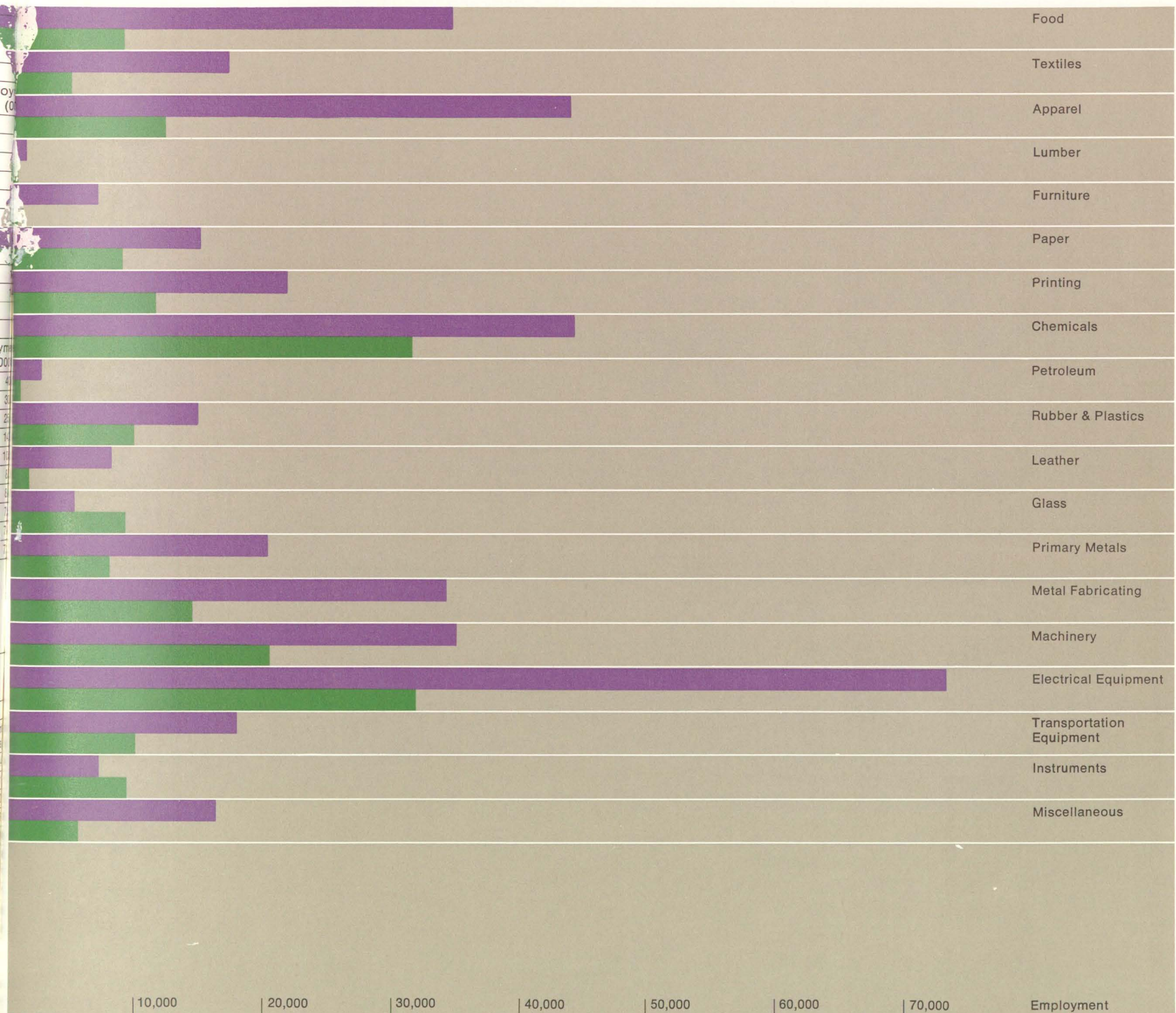
Industrial Belt			
SIC	Description	Establishments	Empl
233	Women's Outerwear	3,407	
275	Commercial Printing	1,905	
239	Misc. Fabricated Textile Products	1,521	
234	Women's Undergarments	486	
231	Men's Suits and Coats	286	
399	Miscellaneous Manufactures	874	
225	Knitting Mills	589	
396	Costume Jewelry	685	
238	Misc. Apparel & Accessories	578	
236	Children's Outerwear	454	

Suburban Industrial Settlement			
SIC	Description	Establishments	Empl (000)
372	Aircraft and Parts	59	
366	Communication Equipment	112	
233	Women's Outerwear	881	
367	Electronic Components	149	
225	Knitting Mills	299	
283	Drugs	59	
275	Commercial Printing	547	
307	Miscellaneous Plastics Products	257	
394	Toys and Sporting Goods	138	
205	Bakery Products	163	

The Leading Industries in the New Jersey Sector of the Metropolitan Area

Industrial Belt			
SIC	Description	Establishments	Empl (000)
366	Communication Equipment	46	
233	Women's Outerwear	436	
367	Electronic Components	111	
364	Lighting & Wiring Equipment	97	
356	General Industrial Machinery	106	
284	Soaps, Cleaners, & Toilet Goods	135	
307	Miscellaneous Plastics Products	200	
283	Drugs	65	
205	Bakery Products	118	
335	Nonferrous Rolling & Drawing	43	

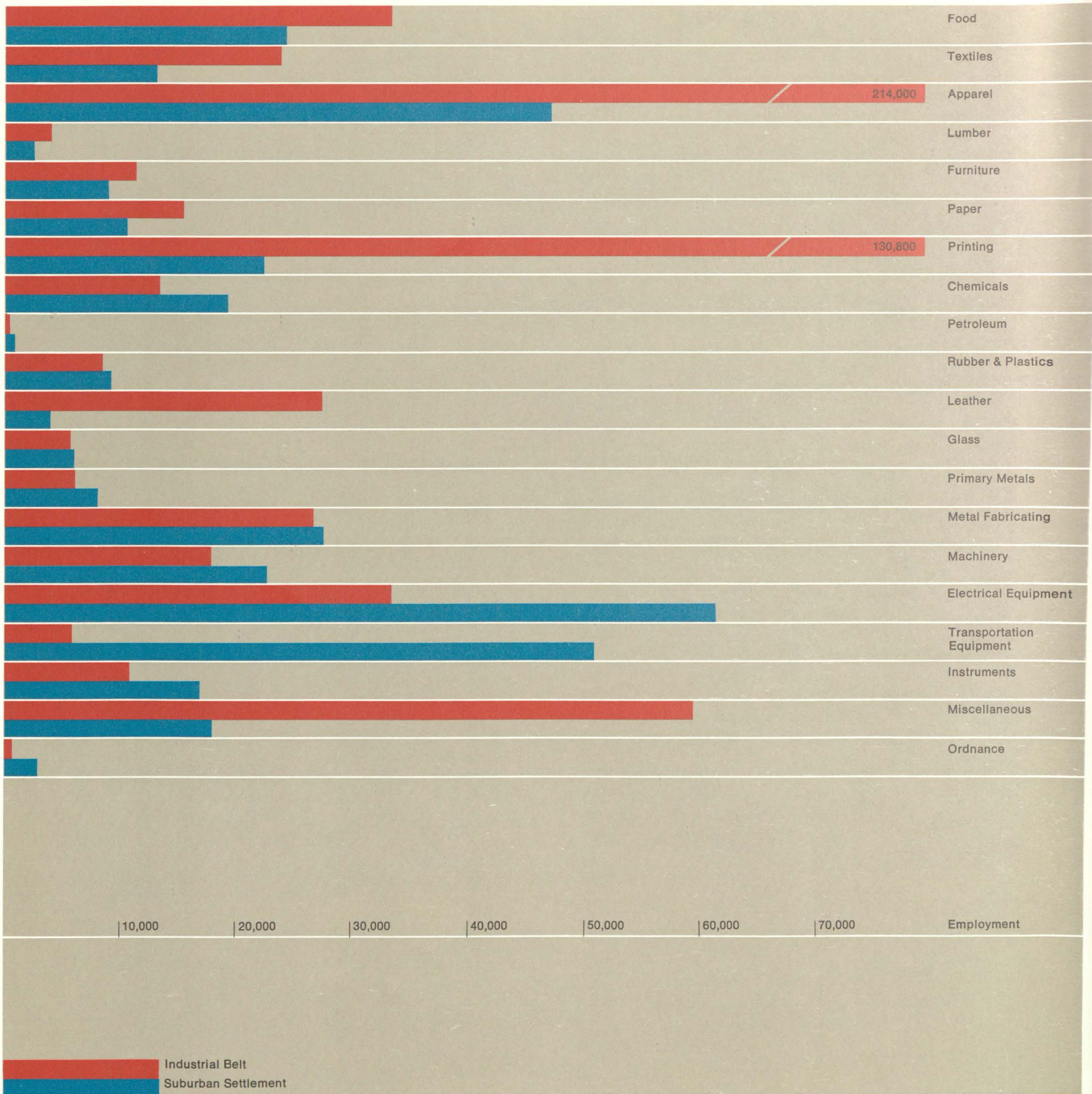
Suburban Industrial Settlement			
SIC	Description	Establishments	Empl (000)
367	Electronic Components	101	
281	Industrial Chemicals	65	
283	Drugs	40	
371	Motor Vehicles & Equipment	13	
307	Miscellaneous Plastics Products	137	
284	Soaps, Cleaners, & Toilet Goods	53	
384	Medical Instruments	18	
355	Special Industry Machinery	92	
233	Women's Outerwear	140	
329	Misc. Nonmetallic Mineral Products	48	



10,000 | 20,000 | 30,000 | 40,000 | 50,000 | 60,000 | 70,000 | Employment

Industrial Belt  
 Suburban Settlement

Graph 26  
 Manufacturing in New York  
 1967 Employment



The Newark-Perth Amboy District is the most extensive of the three identifiable components of the Northern New Jersey Industrial Belt. It extends south from the Bergen-Passaic District through the eastern portions of Essex, Union and Middlesex Counties. The District is composed of seventeen contiguous communities which occupy a total of almost 130 square miles.

The Newark-Perth Amboy District lies at the convergence of all the major land transportation routes serving North-eastern New Jersey and is also well-endowed with maritime and air transport facilities. The Port Authority's container-ship terminals at Port Elizabeth and Port Newark are centrally located within the District, as is Newark Airport (which is undergoing a \$200 million redevelopment). The excellence of this transportation resource is the reason underlying its industrial prominence and its role as a major center for the distributive functions: trucking terminals, warehouses, wholesalers.

The District contains a wide array of manufacturing locales, ranging from such well-established centers as Newark, Irvington, Belleville and Elizabeth, to places whose industrial development is less than a decade old. Newark's position as the prime city of the District and, in fact, of the State, is traceable to its origin in Colonial times as an important way station and transshipment point—at the edge of the Hackensack Meadows—on the route between New York and Philadelphia. In Newark today are located the headquarters of major insurance companies, financial institutions and other business activities.

Industrial production in the District is highly varied, ranging from nonferrous smelting and petroleum refining to precision instruments and giftwares.

The Newark-Perth Amboy District contains 3,323 manufacturing establishments employing 188,800 persons.

While no one single industry dominates the industrial pattern of the District, chemicals, with about 16 per cent of the manufacturing employment, and electrical equipment and supplies, also with 16 per cent, are the top-ranking industries. The production of metals and metal products, as a composite, accounts for 25 per cent of the employment. This grouping is made up of primary metals (mostly nonferrous), fabricated metals and machinery, accounting respectively for 7, 9 and 9 per cent of the District's industrial employment.

The value of petroleum refining in the District far exceeds its importance as a source of employment. The refinery industry not only absorbs chemicals and other supplies from regional producers, but is also a critical source of basic materials for the District's industrial chemicals industry. As a consequence, virtually all phases of the chemical industry are heavily represented in the District. Industrial organic and inorganic chemicals employs almost 6,000 persons. Employment in the production of drugs and pharmaceuticals exceeds 10,000. Another important branch of the District's chemical industry is the production of paints and coatings.

The same picture of diversification is noted in electrical equipment and supplies. Employment of 5,000 or more is found in wiring supplies, communications apparatus and electronic components.

In the metals grouping, primary metals is a large component, with nonferrous (especially copper) smelting, refining, rolling, drawing, and casting accounting for the bulk of the production. In fabricated metals, the production of screws, bolts, valves, pipe fittings, springs, and stampings are of primary importance. The Newark-Perth Amboy District leads in the manufacture of metal-working and general industry machinery.

Food production is another characteristic industry in this District. The chief elements of this activity are beverages and bakery goods.

## Principal Industries of the Newark-Perth Amboy District

SIC	Industries	Establishments	Employment
	Total District	3,323	188,800
205	Bakery Products	51	5,700
208	Beverages	34	7,200
233	Women's Outerwear	124	5,100
251	Household Furniture	44	2,000
265	Paperboard Containers & Boxes	40	2,300
275	Commercial Printing	153	2,300
281	Industrial Chemicals	57	5,900
283	Drugs	32	10,100
285	Paints and Allied Products	58	3,000
307	Miscellaneous Plastics Products	91	4,600
333	Nonferrous Metals	6	3,500
335	Nonferrous Rolling and Drawing	20	5,300
344	Structural Metal Products	119	3,000
345	Screw Machine Products	49	2,500
346	Metal Stampings	54	2,000
349	Misc. Fabricated Metal Products	55	4,300
354	Metal Working Machinery	164	4,300
356	General Industrial Machinery	46	5,300
361	Electric Distribution Equipment	20	3,900
363	Household Appliances	11	3,500
364	Lighting and Wiring Equipment	40	8,300
366	Communication Equipment	21	5,400
367	Electronic Components	46	6,000
371	Motor Vehicles & Equipment	22	6,500
394	Toys and Sporting Goods	29	2,800
399	Miscellaneous Manufactures	65	2,000
	Other	1,872	72,000

## A Few of the Larger Plants in the Newark-Perth Amboy District . . .

American Smelting & Refining, Perth Amboy (Middlesex)	Metal Smelting and Refining
Anheuser-Busch, Newark (Essex)	Beer
P. Ballantine & Sons, Newark (Essex)	Beer and Ale
Burry Biscuit, Elizabeth (Union)	Crackers and Cookies
Federal Pacific Electric, Newark (Essex)	Electrical Apparatus
General Aniline & Film, Linden (Union)	Dyestuffs, Chemicals
General Motors, Linden (Union)	Motor Vehicle Assembly
Hoffmann-LaRoche, Nutley (Essex)	Pharmaceutical Preparations
Humble Oil Company, Linden (Union)	Petroleum Refining & Chemicals
International Smelting & Refining, Perth Amboy (Middlesex)	Metal Smelting and Refining
I.T.T., Nutley (Essex)	Navigation and Communication Systems
Merck & Company, Rahway (Union)	Pharmaceuticals
Simmons Company, Elizabeth (Union)	Mattresses and Bedsprings
The Singer Company, Elizabeth (Union)	Sewing Machines and Parts
The Thomas & Betts Company, Elizabeth (Union)	Wiring Devices
United States Metal Refining Company, Carteret (Middlesex)	Metal Smelting and Refining
Wallace & Tiernan, Belleville (Essex)	Mechanical Control & Metering Equipment
Westinghouse Electric, Newark (Essex)	Electrical Measuring Instruments
Weston Instruments, Newark (Essex)	Electrical and Other Measuring Instruments

The Bergen-Passaic District embraces 108 square miles in the southern portions of Bergen and Passaic Counties. Paterson, one of the District's principal industrial centers, was the site of the Nation's first organized industrial development, initiated by Alexander Hamilton to take advantage of the water power generated at the falls of the Passaic River. Low-cost barge transportation on the Passaic, as well as the Hackensack River, was the impetus also for the spread of industrial production into such nearby cities as Passaic and Hackensack. Expansion from these industrial nuclei has occurred at various times and has resulted in a virtually continuous area of manufacturing and related distributive activity. Totowa, Clifton, Garfield, Teterboro and Carlstadt are representative of the highly industrialized communities falling within the District.

Southern Bergen County contains about 2,000 acres—designated for industry—in the largely undeveloped Hackensack River Meadows.

In 1969, the Bergen-Passaic Industrial District contained almost 2,700 manufacturing establishments employing over 142,000 persons. Once dominant, the textile and textile finishing industries have receded in importance. Currently, textiles and apparel, both labor-intensive industries, together account for less than 20 per cent of the District's industrial employment. The leading manufacturing activities today include electrical equipment, rubber and plastics products, paper and allied products, and chemicals. The production of transportation equipment, fabricated metals, food products, and primary metals is also important.

The District's principal products are communication equipment, women's outerwear, aircraft and parts, textile finishing, and plastics products. Other important products are fabricated rubber goods, soaps and detergents, paper-board containers and boxes, and bakery products.

A Few of the Larger Plants in the Bergen-Passaic District . . .

Principal Industries of the Bergen-Passaic District

SIC	Industries	Establishments	Employment
	Total District	2,684	142,700
205	Bakery Products	40	3,700
225	Knitting Mills	38	2,000
226	Textile Finishing, except Wool	79	5,300
233	Women's Outerwear	143	6,000
264	Misc. Converted Paper Products	48	3,700
265	Paperboard Containers & Boxes	36	3,500
275	Commercial Printing	147	2,400
281	Industrial Chemicals	32	3,100
284	Soaps, Cleaners, & Toilet Goods	54	4,000
306	Fabricated Rubber Products	24	4,100
307	Miscellaneous Plastics Products	84	5,200
335	Nonferrous Rolling & Drawing	13	2,100
341	Metal Cans	6	2,400
344	Structural Metal Products	104	2,500
355	Special Industry Machinery	89	3,300
364	Lighting and Wiring Equipment	34	2,100
366	Communication Equipment	20	15,900
367	Electronic Components	50	2,200
372	Aircraft and Parts	12	5,300
	Other	1,631	63,900

Becton Dickinson and Company, East Rutherford (Bergen)	Surgical and Medical Instruments
Bendix Corporation, Teterboro (Bergen)	Aerospace Equipment
Continental Can, Paterson (Passaic)	Metal Cans
Curtiss-Wright, Wood-Ridge (Bergen)	Aircraft Engines
Jewel Electric Products, Fair Lawn (Bergen)	Electric Lamps
Raybestos-Manhattan, Passaic (Passaic)	Rubber Products
National Biscuit, Fair Lawn (Bergen)	Cookies and Crackers
Singer-General Precision, Inc., Kearfott Division, Little Falls (Passaic)	Aerospace Equipment
Shulton, Inc., Clifton (Passaic)	Toilet and Pharmaceutical Preparations
Niroyal, Passaic (Passaic)	Rubber Belts and Hoses
Yardley of London, Inc., Totowa (Passaic)	Cosmetics and Fragrances

The Hudson County District, with 2,080 industrial establishments, and employment in excess of 107,000, is the most intensively industrialized of all the counties in northern New Jersey. In Hudson County, industry has settled in two general areas. One faces west and is oriented toward Newark; the other faces east toward the Hudson River and New York. As an important element in the Port, as a rail terminus, and as a focal point of major highways, the County has progressed through various steps of industrial development. The seeds of growth and progressive redevelopment have been ever present. In Bayonne, for example, much of its heavy manufacturing is being replaced by lighter processing and fabricating activities.

The County contains a large share of the Hackensack Meadowlands, parts of which have already been developed for new industrial and distribution activity. Nonetheless, vacant land for industry in the Meadows alone amounts to 5,300 acres.

North Bergen, West New York, Secaucus, Kearny, Hoboken, Jersey City, and Bayonne are the principal communities, each of which contains one or more major producers whose products are household names.

The production of electrical equipment and supplies is the leading industry and absorbs 18 per cent of the County's industrial employment. Communication equipment and electronic components make up the major items of production.

Proximity to New York's garment center and availability of labor make apparel the next largest industry, absorbing about 17 per cent of the County's industrial employment.

Ranking high in the County's industrial pattern is food processing, representing a broad array of products, much of it dependent upon foreign sources of supply. Typical of the latter is coffee roasting and processing. Production of soaps, detergents, toiletries and industrial chemicals accounts for the bulk of the output in the chemicals field. Other important industries include machinery, fabricated metals, paper goods and textiles. Among the miscellaneous industries, toys and sporting goods and office supplies are important specialties.

Principal Industries in the Hudson County District

SIC	Industries	Establishments	Employment
	Total District	2,080	107,200
201	Meat Products	22	2,000
209	Miscellaneous Foods	35	4,900
225	Knitting Mills	75	2,500
233	Women's Outerwear	169	8,000
234	Women's Undergarments	21	2,000
239	Misc. Fabricated Textile Products	545	4,900
265	Paperboard Containers & Boxes	40	3,200
275	Commercial Printing	58	2,800
284	Soaps, Cleaners, & Toilet Goods	33	5,100
335	Nonferrous Rolling & Drawing	10	3,100
353	Construction Machinery	8	2,600
356	General Industrial Machinery	20	4,000
364	Lighting and Wiring Equipment	23	2,200
366	Communication Equipment	5	10,100
367	Electronic Components	15	5,000
394	Toys and Sporting Goods	14	2,000
	Other	987	42,800

Some of the Larger Plants in the Hudson County District . . .

American Can, Jersey City	Metal Cans
Bethlehem Steel, Hoboken	Shipbuilding
Colgate-Palmolive, Jersey City	Soap and Detergents
General Foods, Maxwell House Division, Hoboken	Coffee
General Motors, Hyatt Bearing Division, Harrison	Bearings and Automatic Transmissions
Maidenform, Bayonne	Women's Undergarments
Otis Elevator, Harrison	Elevators & Escalators
R.C.A., Harrison	Electronic Tubes and Transmitters
Remco Industries, Harrison	Toys
Western Electric, Jersey City	Electronic Components
Western Electric, Kearny	Switchboard and Switchgear Apparatus
Westinghouse Electric, Jersey City	Elevators & Escalators
Worthington Corporation, Harrison	Refrigeration Machinery

Those areas adjoining the Newark-Perth Amboy District comprise two distinct industrial areas. Western Essex and western Union Counties and all of Morris County as a group contain 1,392 industrial establishments whose aggregate employment totals 95,200. Here, three major industry groups dominate the scene: chemicals, machinery and electrical goods. Taken together, they account for 51 per cent of the industrial employment. Drugs are the principal product in chemicals; special industry and office machinery are prominent in the machinery industry, while distribution equipment, electronic components, radio and TV sets and communication equipment are especially prominent in electrical goods.

The outlying portion of Middlesex and all of Somerset and Monmouth Counties comprise an industrial area numbering 1,342 establishments and employing 114,800 persons. There are some distinct sub-clusters of industry; especially prominent is the grouping in the Raritan Valley where there is extensive production of industrial chemicals, plastics and synthetics, and drugs. Ranking next to chemicals is the production of electrical goods in which electronic components and accessories are prominent. Other important activities include instruments, machinery, abrasives, and asbestos products.

Outside of the Bergen-Passaic Industrial District, suburban manufacturing is carried on in over 1,100 establishments with a total work force of over 47,000. The preponderance of this settlement occurs in Bergen County; the topographically rugged northern half of Passaic remains relatively undeveloped industrially, pending completion of highway improvements leading into the area. The industrial mix corresponds generally to that of the Bergen-Passaic District, although there is a somewhat greater proportion of the light phases of industries. Printing is relatively more important. Soaps, detergents, and toiletries are prominent in chemicals, while motor vehicle assembly dominates the area's production of transportation equipment.

## Principal Industries in Suburban Essex-Morris-Union

SIC	Industries	Establishments	Employment
	Total District	1,392	95,200
281	Industrial Chemicals	26	2,500
283	Drugs	13	4,400
307	Miscellaneous Plastics Products	72	3,900
355	Special Industry Machinery	45	3,700
361	Electric Distribution Equipment	28	2,400
365	Radio and TV Receiving Equipment	12	2,000
366	Communication Equipment	25	2,100
367	Electronic Components	52	3,800
	Other	1,119	70,400

## Principal Industries in Suburban Middlesex, Somerset &amp; Monmouth

SIC	Industries	Establishments	Employment
	Total District	1,342	114,800
233	Women's Outerwear	86	4,100
264	Misc. Converted Paper Products	21	3,500
265	Paperboard Containers & Boxes	18	2,700
281	Industrial Chemicals	26	8,400
283	Drugs	23	5,400
284	Soaps, Cleaners, & Toilet Goods	14	2,500
307	Miscellaneous Plastics Products	37	2,200
329	Misc. Nonmetallic Mineral Products	14	3,800
335	Nonferrous Rolling & Drawing	12	2,100
358	Service Industry Machines	6	2,100
367	Electronic Components	30	8,200
371	Motor Vehicles & Equipment	4	2,600
384	Medical Instruments	8	5,500
386	Photographic Equipment	6	2,700
	Other	1,037	59,000

## Principal Industries in Suburban Bergen-Passaic

SIC	Industries	Establishments	Employment
	Total District	1,167	47,300
272	Periodicals	11	2,500
284	Soaps, Cleaners, & Toilet Goods	20	2,400
371	Motor Vehicles & Equipment	6	4,700
	Other	1,130	37,700

Some of the Larger Plants in Suburban Essex,  
Morris and Union . . .

In Essex	
Edison Industries, West Orange	Office Machines
Foster-Wheeler, Livingston	Boiler Works & Industrial Machinery
Litton Industries, Monroe Division, Orange	Calculating Machines
Schering Company, Bloomfield	Pharmaceuticals
Wagner Electric, Livingston	Electron Trans- mitting Tubes
Westinghouse Electric, Bloomfield	Electric Lamps
In Morris	
Aircraft Radio, Subsidiary of Cessna Aircraft, Boonton	Machine Tools & Radio Equipment
Automatic Switch Company, Florham Park	Valves and Industrial Controls
Howmet, Dover	Nonferrous Castings
Rowe International, Subsidiary of Triangle Industries, Whippany	Automatic Vending Machines
Sandoz-Wander Inc., Hanover	Pharmaceuticals and Dyestuffs
The Mennen Company, Morristown	Toiletries
Varietyper Corporation, Hanover	Printing Machines
Warner-Lambert Pharmaceuticals, Morris Plains	Pharmaceuticals
Whippany Paper Board Company, Whippany	Paperboard
In Union	
Air Reduction, Union	Metalworking Machinery
Amerace-Esna, Union	Bolts, Nuts, Rivets, etc.
American Can, Hillside	Metal Cans
Bell Telephone Laboratories, Murray Hill	Research & Development
Bristol-Myers, Hillside	Toilet Preparations
CIBA Pharmaceuticals, Summit	Pharmaceuticals
Continental Copper & Steel Industries, Hillside	Electrical Wire and Cable
C. R. Bard, Inc., Murray Hill	Surgical Instruments
Lockheed Aircraft, Electronics Division, Plainfield	Electronic Components
Schering Laboratories, Union	Pharmaceuticals

A Few of the Larger Plants in Suburban Middlesex,  
Somerset and Monmouth Counties . . .

In Middlesex	
Du Pont, Parlin	Paints and Plastic Materials
Gulton Industries, Metuchen	Electronic Components
Ford Motor, Edison	Motor Vehicles
Fedders, Edison	Air Conditioning Apparatus
Hercules, Parlin	Explosives
Johnson & Johnson, New Brunswick & Milltown	Surgical Supplies
National Lead, Sayreville	Nonferrous Metal Rolling & Drawing
Phelps-Dodge, Dayton	Copper Rolling and Drawing
Revlon, Edison	Toilet Preparations
Squibb, New Brunswick	Pharmaceuticals
Standard Plastic Products Company, South Plainfield	Plastic Products
Sunshine Biscuits, Sayreville	Cookies and Crackers
Personal Products, Subsidiary of Johnson & Johnson, Milltown	Converted Paper Products
In Somerset	
American Cyanamid, Bound Brook	Industrial Chemicals
Burroughs, Warren	Electronic Components
Ethicon, Division of Johnson & Johnson, Somerville	Surgical Supplies
Johns-Manville, Manville	Asbestos Products
R.C.A., Somerville	Radio and TV Equipment
Union Carbide, Bound Brook	Plastics Materials
In Monmouth	
Bell Telephone Laboratories, Holmdel	Computing Machines
The Bendix Corporation, Eatontown	Motors and Generators
Electronic Associates, West Long Branch	Electronic Equipment
Frequency Engineering, Howell	Radio and TV Equipment
Lily Tulip, Division of Owens-Illinois, Holmdel	Sanitary Food Containers

In Bergen	
Arwood Corporation, Rockleigh	Nonferrous Casting
Ford Motor, Mahwah	Motor Vehicles
Prentice-Hall, Englewood Cliffs	Book Publishing
Western Union, Mahwah	Communication Equipment
In Passaic	
Du Pont, Pompton Lakes	Explosives
Givandan Corporation, Delawanna	Miscellaneous Chemicals

### The New York Industrial Belt The Manhattan District

The Manhattan of today differs markedly from the Manhattan of twenty years ago. Today, Manhattan is, first and foremost, a prime transaction and marketing center and is the headquarters of manufacturing enterprises, of foreign commerce, of wholesale trade, and of financial institutions, whose transactions and communications reach into all sectors of the national and world economy.

Manufacturing, with 396,600 workers, and another 85,700 employees of Central Administrative Offices of industrial concerns, constitutes about 25 per cent of the Borough's total employment. Manhattan, therefore, provides more industrial jobs than any other county in the Metropolitan Area or in the Nation. Actual production, however, has tended over the last two decades to be replaced by the burgeoning of office activities: headquarters, marketing, finance and others. As this has occurred, much of the Island's industrial space, mainly in multi-story lofts, has given way to the construction of office buildings, of which 99 were built in the 1960's alone. The large-scale construction of apartment buildings has also contributed to reduce the amount of manufacturing floor space in Manhattan. Some industry has thus relocated to other boroughs of the City as well as to suburban locations. The industry that has remained is closely tied to the Manhattan transaction economy.

The value of space in Manhattan dictates the use of multi-story buildings for manufacturing enterprises. The typical structure is the loft, a multi-tenant industrial building in which manufacturing is commingled with wholesale and retail trade and service establishments. Of the 210 million square feet of industrial space in the Borough, 80 per cent, or 167 million square feet, is in loft buildings.

Most of Manhattan's manufacturing floor space is rented or leased—rather than owned—by its occupants at relatively low rates. In addition, the loft structure enables its tenants to share services of supply and distribution, as well as other miscellaneous supporting activities. Other important advantages, such as the assembly of a labor force, accrue because of the concentration of manufacturers of similar products into a relatively small geographic area.

The ready availability of such space has made Manhattan highly attractive to the small, young manufacturing firm. The Borough is, in fact, the home of much small industry: 72 per cent of its industrial plants employ fewer than twenty persons (a higher proportion than is found in the other industrial localities of the bi-state Metropolitan Area or of the Nation). Thus, Manhattan's industrial role can be best described as that of an incubator of industry, nurturing and maintaining new enterprises in many diverse production fields, through their stages of initial growth.

The close linkages to marketing and trading are the basic reasons that make Manhattan unique among industrial centers of the Nation, and similar, in this characteristic, to such other world capitals as Paris, London and Tokyo.

Two industries account for 72 per cent of Manhattan's manufacturing employment: apparel with 43 per cent, and printing and publishing with 29 per cent.

The production of apparel is part of a larger entity of activities clustered in the so-called Garment District and in lower Broadway. This activity includes the design, marketing and distribution of the industry's output as well as its manufacture. Over the years, the focus of the Garment District has narrowed down to the production of fashion apparel, with the lower price lines produced elsewhere in the Area and beyond. However, the Island's marketing complex brings together all lines in a trading hub involving out-of-town buyers, buyers for resident headquarters of chain and department stores, and conventional wholesalers dealing in apparel lines.

The wholesalers in this field generated sales volumes of almost \$13 billion in 1967. Not to be overlooked are the suppliers of cloth and knit goods to the cutting trades and importers whose lines cover high fashion as well as budget merchandise. These products flow into stores and shops throughout the Nation. While women's apparel is the preponderant element in the garment industry, men's wear, millinery, infant's wear, apparel accessories and miscellaneous products of the cutting trades each make significant contributions to the Garment District complex. Manhattan also contains substantial production in textile specialties and footwear.

Equally distinctive in its makeup is the printing and publishing industry. Of the 117,200 persons employed in this industry, less than half are production workers engaged in printing; the majority are engaged in the editorial and marketing phases of the industry. This is especially true in the publishing of periodicals and books and in miscellaneous publishing enterprises where the function is closely related to Manhattan's role as a business, cultural and information center. Art work, collation, editing, design and layout that go into the shaping of periodicals, books and other published materials fundamentally set the tone and constitute the basic strength of Manhattan's publishing industry. Physical printing is prominent and significant only in commercial printing, business forms, bookbinding, services to the printing trade and publishing newspapers. Manhattan, in fact, prints only a fraction of the material that it makes ready for the press.

Manufacturing in Manhattan other than apparel, apparel-oriented goods, and printing and publishing is spread over a broad range of categories. It consists of specialty items usually associated with the core of a large urban area: instruments, jewelry and related goods, toys, sports equipment, art goods, costume jewelry, and notions. In these, the close relationship to the marketing complex runs parallel to that observed in the garment and publishing industries.

It is expected that in the future, the transaction orientation of manufacturing in Manhattan will grow rather than diminish. As a consequence, there will be increased specialization with some actual diminution of the work force engaged in physical production. Nevertheless, Manhattan will retain its attractiveness for the entrepreneur producing specialties for highly selective markets.

Essential to maintaining this trend is the construction of new, functional multi-tenant industrial buildings. Efforts to bring such construction into being are currently underway in both the public and private sectors. The New York State Department of Commerce and the Economic Development Administration of the City of New York are currently thinking in terms of the emergence of condominium-type arrangements—whereby the manufacturer owns one unit of a multi-unit structure—to replace conventional rent or lease plans.

## Principal Industries in Manhattan\*

SIC	Industries	Establishments	Employment
	Total District	17,286	396,600
205	Bakery Products	50	2,800
225	Knitting Mills	251	5,200
231	Men's Suits and Coats	249	11,200
232	Men's Furnishings	507	11,800
233	Women's Outerwear	2,696	73,400
234	Women's Undergarments	414	15,200
235	Hats, Caps, and Millinery	461	6,800
236	Children's Outerwear	371	12,000
237	Fur Goods	1,153	7,700
238	Misc. Apparel & Accessories	484	11,100
239	Misc. Fabricated Textile Products	1,182	20,500
251	Household Furniture	212	2,500
264	Misc. Converted Paper Products	154	2,800
272	Periodicals	483	29,900
273	Books	388	22,500
274	Miscellaneous Publishing	304	5,900
275	Commercial Printing	1,653	24,000
278	Blankbooks & Bookbinding	282	7,600
279	Printing Trade Services	299	9,100
284	Soaps, Cleaners, & Toilet Goods	115	3,400
314	Footwear, except Rubber	73	3,900
317	Handbags & Personal Leather Goods	323	9,600
367	Electronic Components	29	2,000
387	Watches, Clocks, & Watchcases	73	2,000
391	Jewelry, Silverware, & Plated Ware	957	11,500
394	Toys and Sporting Goods	137	2,900
396	Costume Jewelry	592	11,600
399	Miscellaneous Manufactures	617	9,300
	Other	2,777	58,400

American Felt Slipper	House Slippers
Coty, Division of Charles Pfizer	Cosmetics
Crowell Collier & Macmillan	Periodicals
Dell Publishing	Books and Periodicals
Fairchild Publications	Book Publishing
Goodstein Brothers	Suits and Coats
Harcourt Brace & World	Book Publishing
Harper & Row Publishers	Book Publishing
Holt Rinehart & Winston	Book Publishing
McGraw-Hill	Book Publishing
Rosenmond-Shiers	Suits and Coats
United States Banknote	Commercial Printing
Washburn Wire	Steel Wire
John Wiley & Sons	Book Publications

\*Excludes administrative and auxiliary units of manufacturing firms: 555 establishments with 85,700 employees.

Astoria, Long Island City, Maspeth, Greenpoint, Williamsburg, the Brooklyn Navy Yard, South Brooklyn, and Bush Terminal are the localities that make up the Western Brooklyn-Western Queens Industrial District. Historically, access to the waterfront was the basis for industrial settlement near the East River and Upper New York Bay. Imported raw materials—sugar, coffee, rubber, asphalt—led to the expansion of shipping facilities and to basic industrial processing along the waterfront itself and in the backland of the docks and terminals. Similarly, deepening of the Gowanus Bay industrialized a large section of South Brooklyn inland from the Upper Bay. The coming of the Long Island and the Brooklyn-Queens Expressways led to development of the District along the boundaries we observe today.

The Western Brooklyn-Western Queens Industrial Belt, according to the most recent enumeration, contains a total of 5,230 manufacturing establishments employing about 209,000 persons. With the exception of tobacco products and petroleum refining, all major industries are represented in the District.

Production of apparel and textiles occupies close to 25 per cent of the District's manufacturing labor. Apparel production, the dominant element in this grouping, encompasses the entire garment field, with outerwear accounting for about a third of the output. In textiles, production is largely given over to knit cloth which finds its market in the Area's cutting trades.

The metal fabricating industry accounts for 7 per cent of the District's employment. Most important is the fabricated structural metal products industry, followed by metal stampings and metal plating, coating, and polishing.

Special industry machinery is the major element in the production of machinery.

The electrical equipment industry accounts for 10 per cent of the District's employment. The production of electrical lighting and wiring equipment absorbs almost half of the employment in this industry. Ranking next are communication equipment, electronic components and distribution equipment.

In food processing, the District is dotted by several large bakeries and beverage producers which supply the local market. These, together with meat processing, dairy products, specialty canned goods, sugar, and confectionery account for just under 10 per cent of the District's manufacturing employment.

Toys and sporting equipment and costume jewelry are prominent in miscellaneous manufactures.

Principal Industries in the Western Brooklyn-Western Queens District

SIC	Industries	Establishments	Employment
	Total District	5,230	209,400
201	Meat Products	39	2,100
205	Bakery Products	84	3,600
207	Confectionery	29	3,300
208	Beverages	54	6,900
225	Knitting Mills	310	8,800
231	Men's Suits and Coats	33	5,800
233	Women's Outerwear	407	12,700
234	Women's Undergarments	51	2,900
238	Misc. Apparel and Accessories	82	3,100
239	Misc. Fabricated Textile Products	226	4,300
251	Household Furniture	115	2,300
254	Partitions & Fixtures	82	2,600
264	Misc. Converted Paper Products	123	5,000
265	Paperboard Containers and Boxes	77	5,200
275	Commercial Printing	191	4,200
278	Blankbooks & Bookbinding	53	2,800
284	Soaps, Cleaners, & Toilet Goods	91	2,500
307	Miscellaneous Plastics Products	122	3,800
314	Footwear, except Rubber	39	3,600
317	Handbags & Personal Leather Goods	63	3,200
344	Structural Metal Products	158	4,400
346	Metal Stampings	78	3,200
347	Metal Plating, Coating & Polishing	124	2,600
349	Misc. Fabricated Metal Products	63	2,000
355	Special Industry Machinery	58	3,400
361	Electric Distribution Equipment	17	2,300
364	Lighting and Wiring Equipment	103	7,200
366	Communication Equipment	17	3,500
367	Electronic Components	24	2,700
373	Ship & Boat Building & Repairing	18	2,200
394	Toys and Sporting Goods	140	6,200
396	Costume Jewelry	75	2,700
399	Miscellaneous Manufactures	203	5,700
	Other	1,881	72,600

ABC Consolidated, Queens	Refreshment Merchandising Machines
American Can, Brooklyn	Metal Cans
American Chicle, Queens	Chewing Gum
Barricini, Queens	Candy
Boorum & Pease, Brooklyn	Loose-Leaf Forms
Bulova Watch, Queens	Watches, Radios
Charles Pfizer & Company, Brooklyn	Pharmaceuticals
Continental Connector, Queens	Electronic Connectors
Domino Sugar, Brooklyn	Sugar Refining
Eagle Clothes, Brooklyn	Men's Clothing
Eltra Corporation, Brooklyn	Linotype Machine Accessories
Ford Motor, Instrument Division, Queens	Instrumentation
Robert Hall Clothes, Brooklyn	Men's Suits & Jackets
Intertype Company, Brooklyn	Typesetting Machines
Jacoby-Bender, Inc., Queens	Wrist Watch Attachments
Leviton Manufacturing, Brooklyn	Wiring Devices
National Can, Queens	Tin Cans
Olympic Radio & TV, Queens	Radio & TV Sets
Radio Engineering Labs, Queens	Communication Equipment
Ramer Industries, Brooklyn	Tennis Sneakers, Slippers, Boots
Rheingold Breweries, Brooklyn	Beer and Ale
E. R. Squibb & Sons, Brooklyn	Pharmaceuticals
E. B. Stimpson Company, Brooklyn	Notions
Swingline, Queens	Staples and Staple Machines
Topps Chewing Gum, Brooklyn	Chewing Gum

The frontage facing the Hudson and East Rivers is the historic location of industrial development in the Bronx. The post-World War II era has witnessed considerable development inland from the East River frontage, specifically in the Hunts Point area. Further inland manufacturing has developed in conjunction with commercial activity. The Bronx contains a total of 1,748 manufacturing establishments employing 52,700 persons.

Metal fabrication, machinery and electrical equipment together constitute the largest employment grouping, absorbing a work force of 13,500 or 26 per cent of the District's manufacturing jobs. The most significant component is the fabricated metal industry whose leading products are structural steel assemblies. In machinery, the emphasis is on special and service industry equipment.

The second largest industry from the viewpoint of employment is apparel which accounts for 22 per cent of manufacturing jobs. Ranking next is food processing, in which meat and bakery goods are prominent. Industries of secondary importance in the Bronx include commercial printing and miscellaneous manufactures.

## Principal Industries in the Bronx District

SIC	Industries	Establishments	Employment
	Total District	1,748	52,700
205	Bakery Products	53	2,100
233	Women's Outerwear	304	8,100
307	Miscellaneous Plastics Products	47	2,200
344	Structural Metal Products	91	3,100
	Other	1,253	37,200

Art Steel Company	Metal Office Furniture
S. W. Farber, Inc.	Household Appliances
R. Hoe and Company	Printing Presses
Local Electronics Systems	Electronic Components
Old London Foods	Snack Foods
Plymouth Rock Provisions	Meat Packing Products
Pre-Pak, Inc.	Plastic Products
Stillman Manufacturing	Electric Heating Elements
The H. W. Hudson Company	Indexes and Catalogues

This is an extensive, rather loosely structured industrial configuration that extends from eastern Queens and Brooklyn through Nassau County and into Suffolk County. Historically, industry settled along the route of the Long Island Rail Road, and pushed east with the outward growth of population. During the past decade, the Long Island Expressway has been an important factor in opening new areas in Suffolk County to industrial development.

The geographic pattern of industrial settlement is by no means continuous. There are important industrial clusters such as College Point and Jamaica in Queens and Fort Green and East Flatbush in Brooklyn. In Nassau, there are industrial locales on the north as well as south shores, but the major concentrations are found in the central part of the County focusing around, but not confined to, the Roosevelt Field area. Eastward, this belt, commingled with much commercial development, extends through Farmingdale into Suffolk County. It contains an extensive aerospace complex that supports a host of industrial enterprises and has attracted to it other types of industrial production as well.

All told, the 7,872 manufacturing enterprises lying within this area employ 308,000 persons, and thus constitute an industrial complex of primary importance.

Throughout its expanse, the Long Island District is characterized by the preponderance of light industry. Five decades of intense population growth in Long Island have been a major stimulus in the development of industry, providing an ample labor supply, as well as a large local market. This is reflected in substantial employment in food processing, household goods and commercial supplies. However, the two major concentrations by industrial type, apparel and transportation equipment, each accounting for about 14.5 per cent of manufacturing employment, are oriented to broad market distribution. Apparel production is largely found in the Queens and Brooklyn components of the District while transportation equipment and related industries are centered in Nassau and Central Suffolk.

Transportation equipment is part of the larger aerospace complex, whose influence reaches into electrical equipment (11.8 per cent of the District's industrial employment) and instruments (7.3 per cent). However, aerospace does not absorb the totality of production in these major groupings. These contain an impressive array of advanced technology production whose further development in such growth industries as environmental control, health biologies and learning aids will set the next stage of industrial expansion in the District.

Principal Industries in the Long Island District

Eastern Brooklyn-Eastern Queens

SIC	Industries	Establishments	Employment
	Total District	4,126	143,200
202	Dairy Products	38	2,400
205	Bakery Products	93	5,400
207	Confectionery	23	2,000
208	Beverages	30	2,800
225	Knitting Mills	233	8,400
231	Men's Suits and Coats	33	3,500
233	Women's Outerwear	559	14,200
234	Women's Undergarments	54	2,300
239	Misc. Fabricated Textile Products	181	2,900
251	Household Furniture	193	3,500
265	Paperboard Containers & Boxes	38	2,900
283	Drugs	18	2,300
307	Miscellaneous Plastics Products	88	2,600
344	Structural Metal Products	142	2,700
366	Communication Equipment	21	7,800
367	Electronic Components	26	2,700
394	Toys and Sporting Goods	78	4,900
399	Miscellaneous Manufactures	136	3,600
	Other	2,142	66,300

Nassau-Suffolk

	Total	3,746	164,800
233	Women's Outerwear	191	6,300
275	Commercial Printing	241	4,500
307	Miscellaneous Plastics Products	135	4,100
344	Structural Metal Products	189	4,400
359	Misc. Machinery, except Electrical	328	3,900
362	Electrical Industrial Apparatus	31	2,200
364	Lighting and Wiring Equipment	62	2,600
366	Communication Equipment	80	21,300
367	Electronic Components	85	7,900
372	Aircraft and Parts	51	39,000
386	Photographic Equipment	30	3,300
394	Toys and Sporting Goods	48	2,000
	Other	2,275	63,300

In Brooklyn

Ebinger Baking Company	Bakery Products
Imperial Paper Box Corporation	Paperboard Boxes
Merit Enterprises	Household Cooking Equipment
Piels Brothers	Malt Beverages

In Queens

Continental Baking Company, Jamaica	Bakery Products
Edo Corporation, College Point	Sonar and Detection Equipment
Ideal Toy Corporation, Jamaica	Games and Toys
Ozone Industries, Ozone Park	Aircraft Equipment

In Nassau

Amperex Electronics, Hicksville	Electron Tubes
Aurora Plastics Corporation, West Hempstead	Toys and Games
Consolidated Lithographing Corporation, Carle Place	Commercial Printing
Helena Rubenstein, Greenvale	Cosmetics
General Instrument Corporation, Hicksville	Communications Systems
Grumman Aircraft Engineering, Bethpage	Aircraft
Lundy Electronics and Systems, Glen Head	Aircraft Equipment
Photocircuits, Glen Cove	Printed Circuits
Sperry Gyroscope, Great Neck	Engineering and Scientific Instruments

In Suffolk

Del Laboratories, Inc., Farmingdale	Cosmetics and Drugs
Entenmann's Bakery, Bay Shore	Bakery Goods
Fairfield-Noble Company, Farmingdale	Women's Sportswear
Grumman Aircraft Engineering, Calverton	Aircraft
Hazeltine, Greenlawn	Electronics
Maxson Electronics, Great River	Electronic Systems Equipment
Republic Aviation, Farmingdale	Aerospace Equipment
Rowe Industries, Sag Harbor	Electric Motors and Generators

Although Staten Island is one of New York City's five boroughs, it is in many respects the most suburban of the Metropolitan Area's eighteen counties. Until recent years, the Island's development was hampered by the absence of highway linkages sufficiently comprehensive to integrate it into the regional economy. Accordingly, Staten Island's industrial base—consisting of 176 plants employing 7,700 persons—has been limited to a few industries oriented to water transportation. For example, Procter and Gamble's waterfront plant at Port Ivory is the Island's principal manufacturing enterprise. (The Island's industrial profile is presented in the next chapter.)

The Verrazano-Narrows Bridge and the Staten Island Expressway have overcome the Island's principal transportation problems and Staten Island, which contains major tracts of vacant industrial land, is now in a highly favorable position to participate in the emerging growth patterns of the Metropolitan Area.

Brewer Dry Dock Company	Shipbuilding
Ostwald, Inc.	Marching Band Uniforms
Procter and Gamble	Soaps and Detergents
Sun Chemical Corporation	Pigments
U. S. Gypsum Company	Gypsum Products
Western Electric, Nassau Smelting and Refining Division	Wire Bars

Topography is the key factor in industrial location in these counties. Large portions of Westchester and Rockland are characterized by rugged terrain. The older established industrial locales are found along the lowlands abutting the Hudson River. This is the favored location for heavy and medium-heavy industrial operations, interspersed with light industry. In the inland portions of Westchester County, the long valleys that roughly parallel the Hudson contain important local concentrations of light industry. In Rockland, settlement of light industry is largely confined to the southeastern portions of the County.

The Westchester-Rockland District has 1,558 manufacturing establishments employing a total of 87,300 persons, with Westchester County alone accounting for 73,300. This County developed early because of its close economic linkages with New York City. Rockland's development has been accelerated in recent years by the construction of the New York Thruway, and the arterials connecting the Thruway with New Jersey highways.

As in the Long Island District, Westchester-Rockland industry is composed of a wide spread of industrial categories. Certain specific concentrations should be noted. Chemicals account for 11 per cent of industrial employment with major emphasis on the production of pharmaceuticals. Also significant is the manufacture of industrial chemicals, plastics and synthetics, soaps and toiletries.

Electrical goods and equipment as a group accounts for 12 per cent of industrial employment. In this field, electronic apparatus is the preponderant element.

Of growing significance, especially in Westchester County, is the settlement of central offices and laboratories of large manufacturing corporations which employ an additional 12,900 persons. While some settlements date back twenty and even thirty years, the influx of this type of activity has grown during the post-World War II period. Recent developments indicate that the office-laboratory function will also expand in Rockland County.

Principal Industries in Westchester-Rockland

SIC	Industries	Establishments	Employment
	Total District	1,558	87,300
233	Women's Outerwear	99	4,100
275	Commercial Printing	121	2,500
283	Drugs	26	6,000
335	Nonferrous Rolling & Drawing	15	3,100
367	Electronic Components	38	4,100
371	Motor Vehicles & Equipment	3	6,000
	Other	1,256	61,500

Some of the Larger Plants in Westchester and  
Rockland . . .

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In Westchester

General Foods, White Plains	Food
General Motors, Tarrytown	Auto Bodies
IBM, Armonk	Electronic Data Processing
Otis Elevator, Yonkers	Elevators and Escalators
Russell, Burdsall & Ward, Port Chester	Bolts, Nuts and Screws
Technicon, Tarrytown	Analytical Instruments
Ward Electric, Mount Vernon	Rheostats, Resistors

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In Rockland

American Cyanamid, Lederle Laboratories Division, Pearl River	Pharmaceuticals and Biological Products
Avon Products, Suffern	Cosmetics
Dexter Company, Pearl River	Bindery Products
Orangeburg Manufacturing Company, Orangeburg	Pipes and Tubes





## Space for Industry

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### Metropolitan Space for Industry

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Vacant Land: 195,204 acres in 1,958 tracts.

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Industrial Parks: 17,818 vacant acres in 157 parks.

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Space for Reoccupancy: 1,045 million square feet in existing structures.

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The New York-Northeastern New Jersey Area affords an industrial space resource that is rich in quantity, quality and variety. Each of the eighteen counties—including Manhattan—offers industry a wide choice of suitable space: vacant land, existing industrial structures and industrial parks.

This section presents a profile of the industrial space available, together with a map and a statistical summary of the existing industrial base for each of the eighteen Metropolitan counties. The county profiles provide information about *Vacant Land, Industrial Parks and Existing Floor Space for Reoccupancy*.

A word about the way the information was gathered. . .

The Vacant Land inventories were prepared by the respective City and County Planning Commissions, using criteria developed for the Port Authority by Dr. Dorothy A. Muncy, A.I.P. Industrial Land-Use Consultant. The listings of Industrial Parks were compiled by the Port Authority in direct cooperation with each developer or operator. The Floor Space summaries were obtained from computer tapes of the Tri-State Regional Planning Commission's 1963 Land-Use Inventory.

These profiles are not intended as definitive up-to-the-minute statements of space actually on the market; rather, they are meant to alert the prospective industrial resident of the Metropolitan Area to the amounts and kinds of space he may expect to find.

Land for Industry	Acres
Vacant, zoned industrial	186,047
Vacant, suitable for zoning	4,763
Redevelopment for industry	4,394
Total for 18-county Area	195,204

Almost 98 per cent—or 190,000 acres—of the Metropolitan Area's vacant land resource is already zoned for industrial use. The remaining two per cent is judged suitable for industrial zoning by county planning officials. Industries which need the advantages of sites in the urban centers—all of which are well served by public transportation—will find nearly 4,400 acres in areas being redeveloped for industry. Much of this acreage has already been cleared and is ready for occupancy.

The county reference materials provided in the following pages further classify industrial land by the type of industrial activities permitted, tract size and the kinds of transportation services immediately available to it.

The Metropolitan Area contains numerous zoning districts which differ in the types of industry permitted and other regulations on the use of the land.

These zoning districts range from the most restricted, which permit only very "light" industrial uses—research labs or offices—to the least restrictive, where zoning ordinances accommodate such heavy industrial activities as primary chemicals or metals. Specific information on zoning regulations should be obtained from county or local planning boards (see Agencies Serving the Industrial Prospect, page 253).

Almost three-fifths of the industrial land may be used for medium or heavy industrial activities (see table). While 31 per cent of the total has been specifically zoned for light industry, these industries also may build on land designated for medium-heavy industrial use. Warehouses and distribution centers likewise are usually permitted to build in industrial zones. An additional 1,600 acres have been zoned primarily for such uses.

The Metropolitan Area provides a wide choice of prestige locations for laboratories, offices or headquarters. Almost 15,000 acres are already zoned and another 2,000 are deemed suitable for such zoning.

Almost half of the Area's supply of industrial land is in tracts ranging in size from 26 to 400 acres; only 1 per cent is in tracts smaller than 10 acres (see table).

The Area's 2,000 industrial tracts are well divided among small, medium and large sizes, and are also fairly well distributed among the eighteen counties: thirty-five per cent of the tracts are under 10 acres; 17 per cent are in 11-25 acre sizes; and 26 per cent are in the 26-100 acre group.

It should be noted that the 100 tracts of 401 acres or more are distributed through 13 counties—including several in New York City—and provide, therefore, a wide choice of large sites, while helping to avoid the crowding of the heavier industries into any one area.

#### A word about the term "Tract" . . .

An industrial tract, as defined in this inventory, is:

1. Contiguous land which may have one or more owners and consist of one or more lots;
2. Bounded by one or more of the following:
  - Major road (excluding collector or minor streets);
  - Railroad main line;
  - Natural barriers (rivers, major stream or body of water, or topographic break);
  - Land occupied by any use, or vacant land not suitable for industrial use.

The most distinctive characteristic of industrial sites in the bi-state Area is their quality in terms of the abundant transport services immediately available to them. Almost 62,000 acres have immediate access to highways, freeway interchanges and rail. Another 20,000 are served by highways and freeways, but not rail. Over 27,000 acres have access to freeway interchanges and to rail lines, while 19,000 acres are served by the rail-highway combination.

Nearly 98,000 acres have convenient access to seaports, jet airports and general aviation airports. Another 22,000 acres are within easy reach of airports—both general and commercial—but not of seaports. Almost 1,700 vacant acres, in both New York and New Jersey, are well located with respect to subway stations.

The criteria employed in determining the transportation orientations of each county's industrial land are described in the accompanying box.

#### Zoning for Industry

Type of Industry	Vacant, Zoned Industrial	Vacant, Suitable for Industrial Zoning	Total Vacant Land for Industry	Per Cent of Total
Medium to Heavy	113,982	856	114,838	59
Light Industry	59,988	1,845	61,833	31
Warehouse-Distribution	1,630	54	1,684	1
Research or Office Headquarters	14,841	2,008	16,849	9
<b>Total for 18 Counties</b>	<b>190,441</b>	<b>4,763</b>	<b>195,204</b>	<b>100</b>
<b>Per Cent of Industrial Land</b>	<b>98</b>	<b>2</b>		

#### Industrial Land, by Size of Tract

Tract Size	Number of Tracts	Per Cent of Total	Acres	Per Cent of Total
Under 10 acres	680	35	2,673	1
11- 25	339	17	5,662	3
26- 50	249	13	8,875	5
51-100	258	13	18,450	9
101-200	184	9	26,037	13
201-400	148	8	41,941	22
Over 400	100	5	91,236	47
<b>Total</b>	<b>1,958</b>	<b>100</b>	<b>194,874*</b>	<b>100</b>

#### Transport Orientation Criteria

A tract is deemed to be oriented to a:	If it lies within:
a. Freeway: Controlled access highway with 200 to 500 feet or more right-of-way, median strip, no grade crossing, no access to abutting property	2½ miles of an interchange
b. Major Highway: Four lanes or more, minimum right-of-way 80 feet	¾ mile
c. Rail: Siding or main line at boundary of tract, or available right-of-way for spur to main line to serve vacant tract of not less than 100 acres, over a grade of 3% or less within 20% curvature	3 miles
d. Subway:	½ mile of a station
e. Commercial Air Carrier Airport: Scheduled airline passenger and cargo service; general aviation may be permitted	15 miles or 30 minutes travel time
f. General Aviation Airport: Primarily private planes, including corporate aircraft, some commuter service and inter-airport connecting service	10 miles or 15 minutes travel time
g. Sea Port Facility:	15 miles or 30 minutes travel time

\*Does not include 330 acres for which this information is not available.

The vacant land inventories of Bergen and Hudson counties include approximately 6,700 acres of industrial land (2,000 in Bergen and 4,700 in Hudson) within the Hackensack Meadowlands District, a large marshland covering about 20,000 acres along the lower reaches of the Hackensack River.

While this resource was included in the respective County profiles, it should be noted that jurisdiction for the development of the area is vested in the Hackensack Meadows Development Commission, which was created especially by the New Jersey Legislature. The acreages reported in the county profiles reflect the Commission's Comprehensive Land Use Plan of October, 1970.

Industrial Parks (Spring 1971)	
Number	157
Total Acres	26,735
Vacant Acres	17,818

Industries seeking completely prepared sites will find 17,818 unoccupied acres in the Area's 157 industrial parks. The parks are listed by name under the counties in which they are located. The listings also indicate the amount of unoccupied acreage available in each, and the types of transportation to which they have immediate access (the criteria employed are the same as those applied to Vacant Land).

The parks listed in this section are those that conform to the standards adopted by the National Industrial Zoning Committee. These stipulate that an industrial park must be a single tract of at least 25 acres suitable for industrial use because of location, topography, proper zoning, availability of utilities, and accessibility to transportation. The control and administration of such parks must be vested in a single body which operates under the following standards:

- A. The uses permitted are regulated by protective minimum restrictions including size of site, parking and loading regulations, and building set-back lines from front, side, rear.
- B. The front yards, and side yards adjacent to streets, are to be landscaped in conformance to planning standards set for the park.
- C. All requirements are to be compatible with the community and surrounding land uses in accordance with a comprehensive plan to enable a group of industries to operate within it efficiently.
- D. Such nuisances as noise, vibrations, smoke, dust and dirt, noxious odors, fire and explosive hazards, glare, and heat are generally controlled through the application of performance standards.

Floor Space in Existing Structures	
1963	949 million sq. feet
1970 (est.)	1,045 million sq. feet

To the manufacturers seeking to avoid the expense of plant location and construction, the Metropolitan Area affords excellent opportunities to find suitable space in existing plants by either purchase or leasehold.

The eighteen counties of the Metropolitan Area contain more than one billion square feet of industrial floor space in almost every type of structure. Of these, about 25 million square feet (more generally, between two and three per cent) are estimated to be vacant at any one time due to industrial relocations.

The kind and amount of existing industrial floor space are detailed in a summary table for each of the Area's eighteen counties.

Area in Square Miles	233
Population	898,000
Total Jobs -	321,700
In Manufacturing	107,200
Number of Plants -	2,252
With 20 or More Employees	812
Value of Shipments (Millions)	\$3,045.0
Value Added (Millions)	\$1,469.4
Capital Expenditures for New Plant & Equipment (Millions)	\$ 79.8
Central Administrative Units of Manufacturing Firms:	
Number	54
Employment	5,900

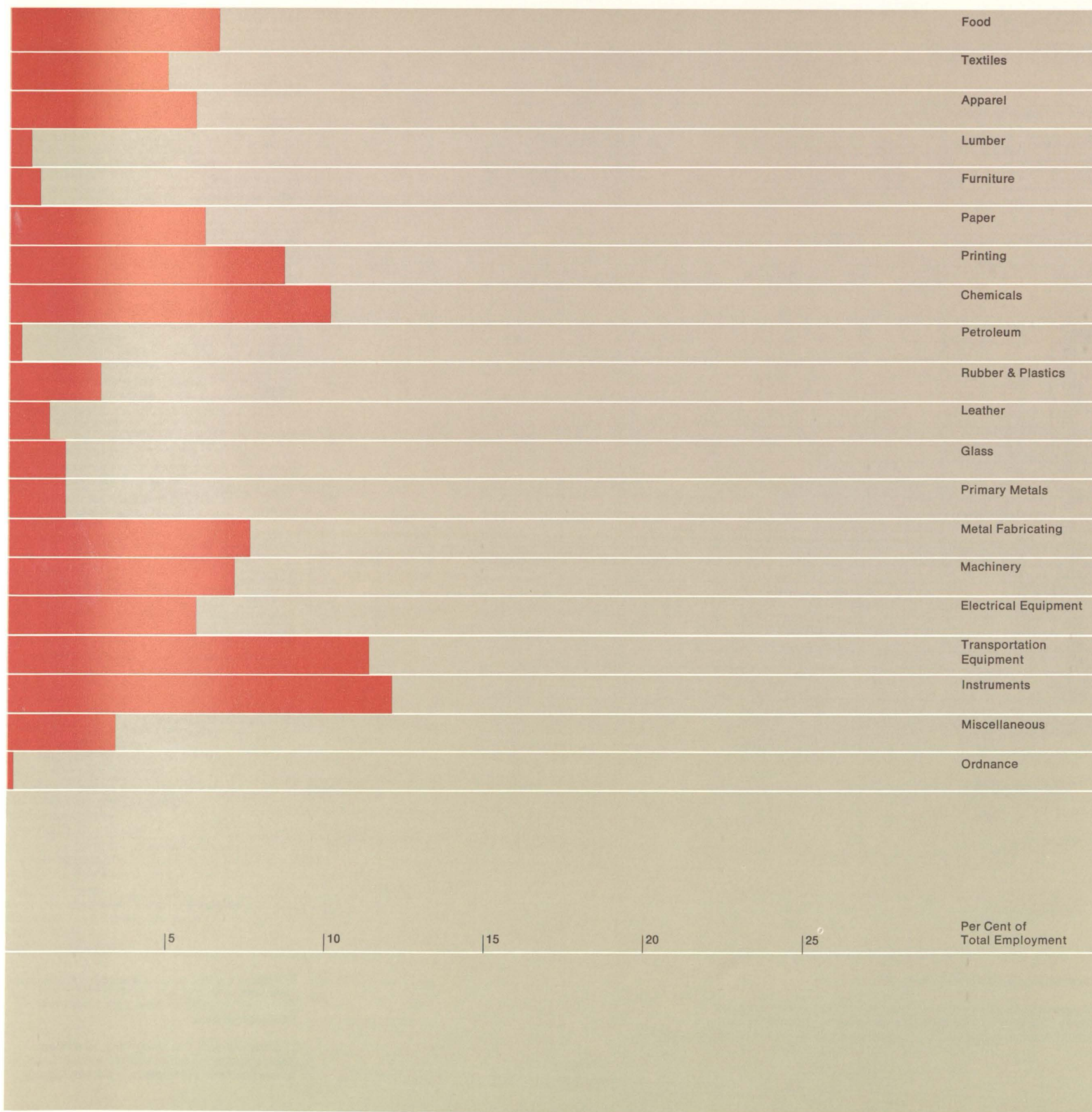


Cities and Towns with 1970 Approximate Populations

- Under 10,000 ●
- 10,000-25,000 ●
- 25,000-100,000 ●
- Over 100,000 ● City
- County Seat ●

0 | 1 | 2 | Miles

Graph 27  
Industrial Profile of Bergen



Bergen County

Total Industrial Land

Vacant and Zoned Industrial	General Industrial (Acres)	8,743*
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Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
No. of Tracts	50	27	18	23	11	6	3	138
Acres	263	428	615	1,591	1,480	1,763	2,603	8,743

Transportation Orientation

Acres	Freeway	Major Highway	Rail	Commercial Airport	General Airport	Port Facility	No Transport Service within Defined Distance
3,561	X	X	X	X	X	X	
85	X	X	X		X	X	
39	X	X			X	X	
303	X	X		X	X	X	
378	X			X	X	X	
96	X		X	X	X	X	
30	X				X	X	
169	X	X			X		
22	X		X		X	X	
12	X		X		X		
35		X	X		X		
43		X			X		
32	X	X	X				
301	X	X					
1,738	X						
273	X		X				
344		X	X				
150			X				
260		X					
872							X
8,743							
Total							

Source: Bergen County Planning Board.

\*Includes 1,290 acres at greater than 10 per cent slope, and 2,023 acres of land in the Hackensack Meadowlands, as designated in the *Hackensack Meadowlands Comprehensive Land Use Plan*, October, 1970.

Floor space in Existing Structures, 1963\*

	Floor Space (Thousands of Square Feet)
Manufacturing Activity	55,537
Lumber	514
Furniture	866
Stone, clay & glass	1,672
Primary metals	1,737
Fabricated metals	3,453
Machinery, except electrical	2,106
Electrical machinery	8,508
Transportation equipment	4,469
Professional scientific equipment	1,091
Miscellaneous durables	5,712
Food	3,189
Tobacco	2
Textiles	1,834
Apparel	1,253
Paper	3,959
Printing & publishing	2,897
Chemicals	9,571
Petroleum	206
Rubber & Plastics	2,357
Leather	141
Warehousing, Trucking & Wholesaling	14,072
Warehousing	7,653
Trucking	1,497
Food wholesaling	908
Other wholesaling	4,014
Total	69,609

Source: 1963 Land Use Inventory. Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, 10 million square feet of Industrial and Warehouse floor space has been put in place in Bergen County.

## Bergen County

Bergen County Industrial Parks	Acreage			Improvements				Transport Orientation*					Other Data	
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			Port Facility
Municipality—Name														
Developer														
Carlstadt—Gotham Industrial Park, Inc. Joseph A. Wilson, President 580 Valley Road Wayne, New Jersey	104	10	22	X	X	X	X	X	X	X	X	X	X	Lease Only
Carlstadt—Triangle Industrial Park Kenilworth Associates 2 Park Avenue New York, New York	26	0	35	X	X	X	X	X	X			X	X	Lease and Package Plans
East Rutherford—East Rutherford Industrial Park S. J. Sisselman 375 Murray Hill Parkway East Rutherford, New Jersey	500	350	30	X	X	X	X	X	X	X		X	X	Lease Only
Fairlawn—Fairlawn Industrial Park McBride Enterprises 808 High Mountain Road Franklin Lakes, New Jersey	190	34	25	X	X	X	X	X	X	X		X	X	Package Sale or Lease
Garfield—Central Bergen Industrial Terminal Central Bergen Associates 141 Lanza Avenue Garfield, New Jersey	35	0	12	X	X	X	X	X	X	X		X	X	Lease Only
Glen Rock—Glen Rock Industrial Park McBride Enterprises 808 High Mountain Road Franklin Lakes, New Jersey	25	6	9	X	X	X	X		X			X	X	Package Plans, Sell, Lease, Lease-Back
Lodi—Bergen County Industrial Park Weny Brothers & Storms Company McLean Boulevard Paterson, New Jersey	30	0	11	X	X	X	X	X	X	X		X	X	Package Plans, Sale, Lease-Back
Lyndhurst—Lyndhurst Industrial and Office Park Bellemead Development Corporation 1099 Wall Street, West Lyndhurst, New Jersey	300	250	13	X	X	X	X	X	X	X		X	X	Flexible
Mahwah—Mahwah Industrial Development McKee Brothers Route 17 Ramsey, New Jersey	225	125	3	X		X	X	X	X			X		Lease Only
Montvale—Montvale-Parkway Campus James Rice Associates Essex Street and Route 17 Maywood, New Jersey	68	48	2	X		X	X	X	X			X		Build-to-Suit, Sale, Lease
Moonachie—Carol Industrial Park, Inc. Charles Klatskin Company, Inc. 375 Murray Hill Parkway East Rutherford, New Jersey	45	0	9	X	X	X	X	X	X			X	X	Lease, Build-to-Suit
Moonachie—Empire Industrial Center Empire Development Corporation Washington Avenue Wood-Ridge, New Jersey	1,200	700	20	X	X	X	X	X	X			X	X	Complete Package Available, Sell or Rent
Moonachie—Midway Industrial Terminal Mr. Leonard Rosen 500 Baldwin Avenue Lodi, New Jersey	40	0	7	X	X	X	X	X	X			X	X	Package Plan, Sell or Lease
Northvale—Northvale Industrial Enterprises Weny Brothers & Storms Company McLean Boulevard Paterson, New Jersey	50	15	4	X		X	X	X		X		X	X	Package Plan, Sale, Lease-Back

\*Determined by means of criteria listed on page 124

Bergen County

Bergen County Industrial Parks	Acreage			Improvements				Transport Orientation*					Other Data	
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			
Municipality—Name Developer											Commercial	General	Port Facility	
Oakland—Oakland Industrial Park McBride Enterprises 808 High Mountain Road Franklin Lakes, New Jersey	200	180	6	X	X	X	X	X	X			X		Package Plan, Sale, or Lease, Build-to-Suit
Ramsey—Ramsey Industrial Development Alexander Summer Company 1180 Raymond Boulevard Newark, New Jersey	45	30	2	X	X	X	X		X			X		Lease or Rent
Ramsey—Ramsey Industrial Park A. K. Augustensen S-114 Fairview Avenue Paramus, New Jersey	40	40	0	X	X	X	X		X			X		Build-to-Suit, Lease, Sale
Ridgefield—Industrial Park of Ridgefield Hanson and Hanson 25 E. Salem Street Hackensack, New Jersey	75	0	7	X	X	X	X	X	X	X	X	X	X	Package Plans or Land Sales
Rockleigh—Rockleigh Industrial Park McBride Enterprises 808 High Mountain Road Franklin Lakes, New Jersey	130	20	9	X	X	X	X	X	X	X		X	X	Package Plan, Sale or Lease
Rutherford—Rutherford Industrial Park Bellemead Development Corporation 1099 Wall Street, West Lyndhurst, New Jersey	85	20	9	X	X	X	X	X	X	X	X	X	X	Package Plan

\*Determined by means of criteria listed on page 124

0 1 2 Miles

Area in Square Miles	128
Population	930,000
Total Jobs -	496,700
In Manufacturing	123,600
Number of Plants -	2,446
With 20 or More Employees	911
Value of Shipments (Millions)	\$3,319.9
Value Added (Millions)	\$1,762.9
Capital Expenditures for New Plant & Equipment (Millions)	\$ 137.1
Central Administrative Units of Manufacturing Firms:	
Number	39
Employment	8,300

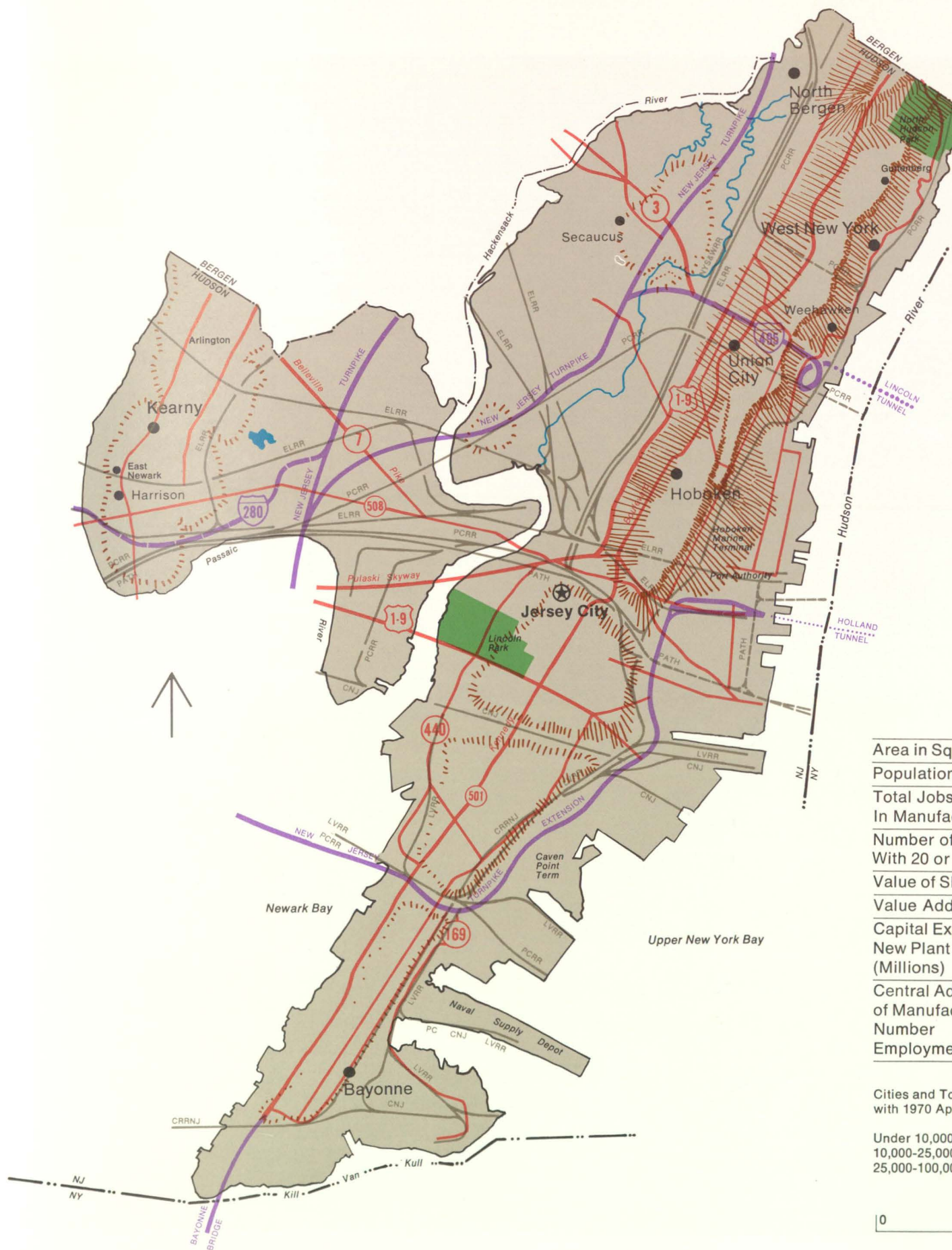


Cities and Towns  
with 1970 Approximate Populations

Under 10,000	●	Over 100,000	⊙	<b>City</b>
10,000-25,000	●			
25,000-100,000	●	County Seat	⊙	

Essex County Industrial Parks Municipality—Name Developer	Acreage		Improvements				Transport Orientation*					Other Data		
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			
											Commercial	General	Port Facility	
Cedar Grove—Cedar Grove Industrial Park Louis Schlesinger Company 901 Broad Street Newark, New Jersey	36	10	20	X	X	X	X	X	X	X	X	X	X	Sell, Lease, Build-to-Suit
Cedar Grove—Edward Cantor Industrial Park Edward A. Cantor Affiliated Interests 1203 W. St. George Avenue Linden, New Jersey	29	29	0	X	X	X	X		X		X	X	X	Lease Only
Fairfield—Central Industrial Park Weinberg & De Petro Realty Company 301 Valley Road Wayne, New Jersey	53	30	8	X	X	X	X	X	X		X	X	X	Sell, Lease, Build-to-Suit
Fairfield—Fairfield Industrial Park Louis Schlesinger Company 901 Broad Street Newark, New Jersey	33	2	17	X	X	X	X	X	X		X	X	X	Sell, Lease, Build-to-Suit
Newark—Newark Industrial Park Newark Paraffine Paper Company 70 Blanchard Street Newark, New Jersey	25	14	12	X	X	X	X	X	X	X	X	X	X	Sell, Lease, Build-to-Suit
West Caldwell—West Essex Industrial Park United Advertising Corporation 354 Park Avenue Newark, New Jersey	184	92	12	X	X	X	X		X			X		Sell, Lease, Build, Lease, Option to Buy

\*Determined by means of criteria listed on page 124



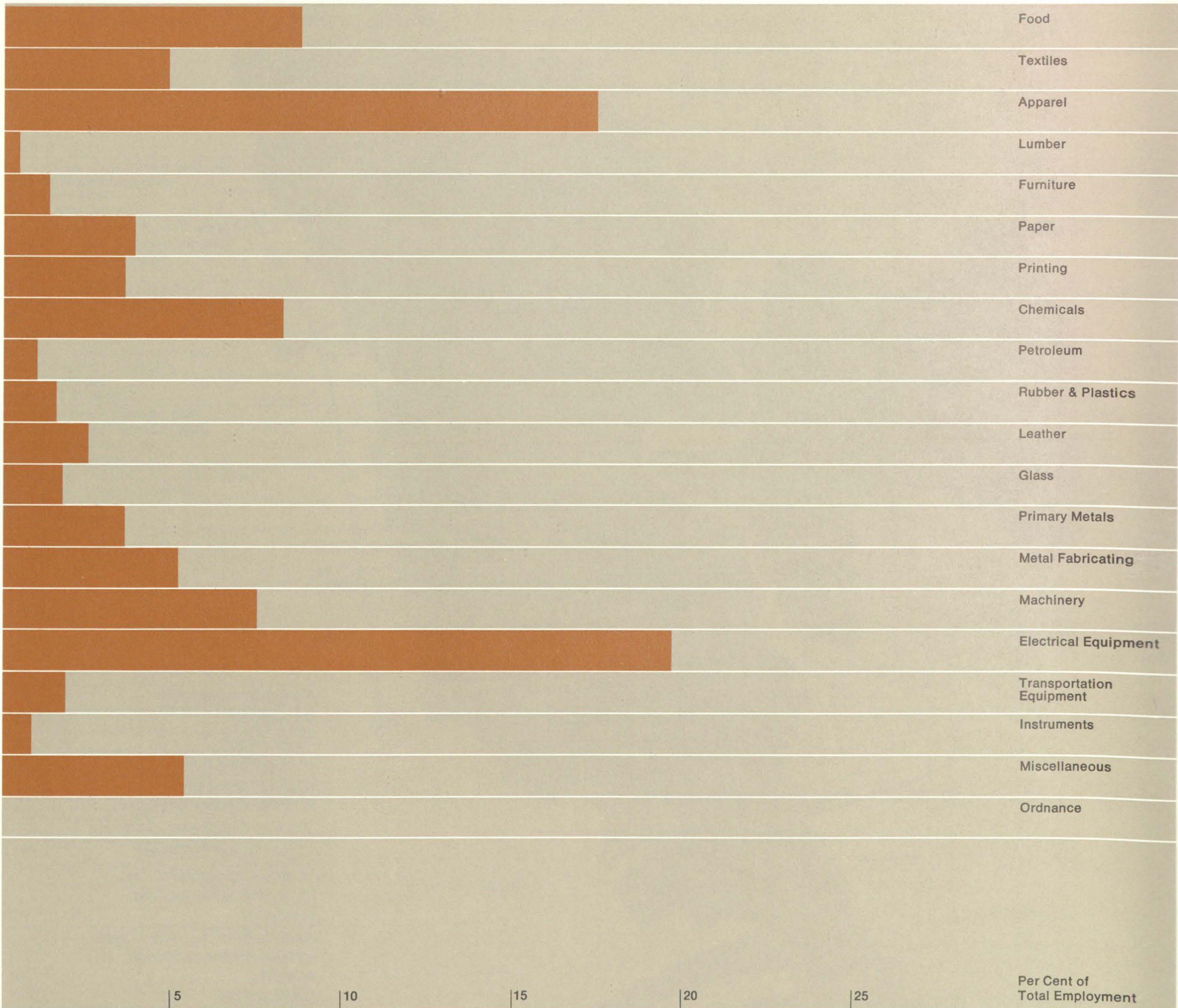
Area in Square Miles	45
Population	609,000
Total Jobs -	286,000
In Manufacturing	107,200
Number of Plants -	2,080
With 20 or More Employees	772
Value of Shipments (Millions) \$	3,425.6
Value Added (Millions)	\$ 1,584.9
Capital Expenditures for New Plant & Equipment (Millions)	\$ 74.0
Central Administrative Units of Manufacturing Firms:	
Number	32
Employment	2,800

Cities and Towns  
with 1970 Approximate Populations

Under 10,000	●	Over 100,000	City
10,000-25,000	●		
25,000-100,000	●	County Seat	⊗

0 1 Miles

Graph 29  
Industrial Profile of Hudson



Hudson County

Total Industrial Land				
Permitted Uses	Vacant & Zoned Industrial	Vacant, Not Zoned Industrial But Suitable	Redevelopment Land	Total
Medium/ Heavy Industrial (Acres)	6,469.1 4,291.2*	147.0	18.6	6,634.7
Light Industry (Acres)	501.4 339.5*	66.1	115.0	682.5
Warehousing and Distribution (Acres)	47.5	—	32.5	80.0
Research & Office (Acres)	49.9 39.2*	—	100.2	150.1
<b>Total (Acres)</b>	<b>7,067.9 4,669.9*</b>	<b>213.1</b>	<b>266.3</b>	<b>7,547.3</b>

Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
<b>Vacant &amp; Zoned Industrial</b>								
No. of Tracts	57	14	3	14	3	11	4	106
Acres	170.6	205.5	124.5	1,069.6	394.1	2,636.7	2,466.9	7,067.9

Vacant, Not Zoned But Suitable

No. of Tracts	—	—	—	1	1	—	—	2
Acres	—	—	—	66.1	147.0	—	—	213.1

Redevelopment Land

No. of Tracts	6	5	5	—	—	—	—	16
Acres	23.3	91.9	151.1	—	—	—	—	266.3

Total

No. of Tracts	63	19	8	15	4	11	4	124
Acres	193.9	297.4	275.6	1,135.7	541.1	2,636.7	2,466.9	7,547.3

Transportation Orientation

Acres	Freeway	Major Highway	Rail	Subway	Commercial Airport	General Airport	Port Facility	Water-front** 35' or More
186.5	X	X	X	X	X	X	X	
2,927.7	X	X	X		X	X	X	X
2,892.8	X	X	X		X	X	X	
179.3	X	X	X		X		X	X
218.8	X		X	X	X	X	X	X
465.6	X		X		X	X	X	
145.0	X		X		X		X	X
170.7	X		X		X		X	
360.9		X	X		X	X	X	X
<b>Total</b>								
7,547.3								

Source: Hudson County Planning Department.

\*Acreage in Meadowlands as in Land Use Plan of the Hackensack Meadowlands Development Commission, 1970.

\*\*Water Depth at Mean Low Tide

Floor Space in Existing Structures, 1963\*

	Floor Space (Thousands of Square Feet)
<b>Manufacturing Activity</b>	<b>57,971</b>
Lumber	442
Furniture	977
Stone, clay & glass	1,937
Primary metals	2,794
Fabricated metals	5,548
Machinery, except electrical	1,011
Electrical machinery	2,644
Transportation equipment	1,062
Professional scientific equipment	787
Miscellaneous durables	4,813
<b>Food</b>	<b>4,943</b>
Tobacco	7
Textiles	1,200
Apparel	6,338
Paper	2,524
Printing & publishing	1,764
Chemicals	15,958
Petroleum	651
Rubber	2,257
Leather	314
<b>Warehousing, Trucking &amp; Wholesaling</b>	<b>23,658</b>
Warehousing	15,053
Trucking	3,314
Food wholesaling	1,387
Other wholesaling	3,904
<b>Total</b>	<b>81,629</b>

Source: 1963 Land Use Inventory. Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, 4.5 million square feet of industrial and warehouse floor space has been put in place in Hudson County.

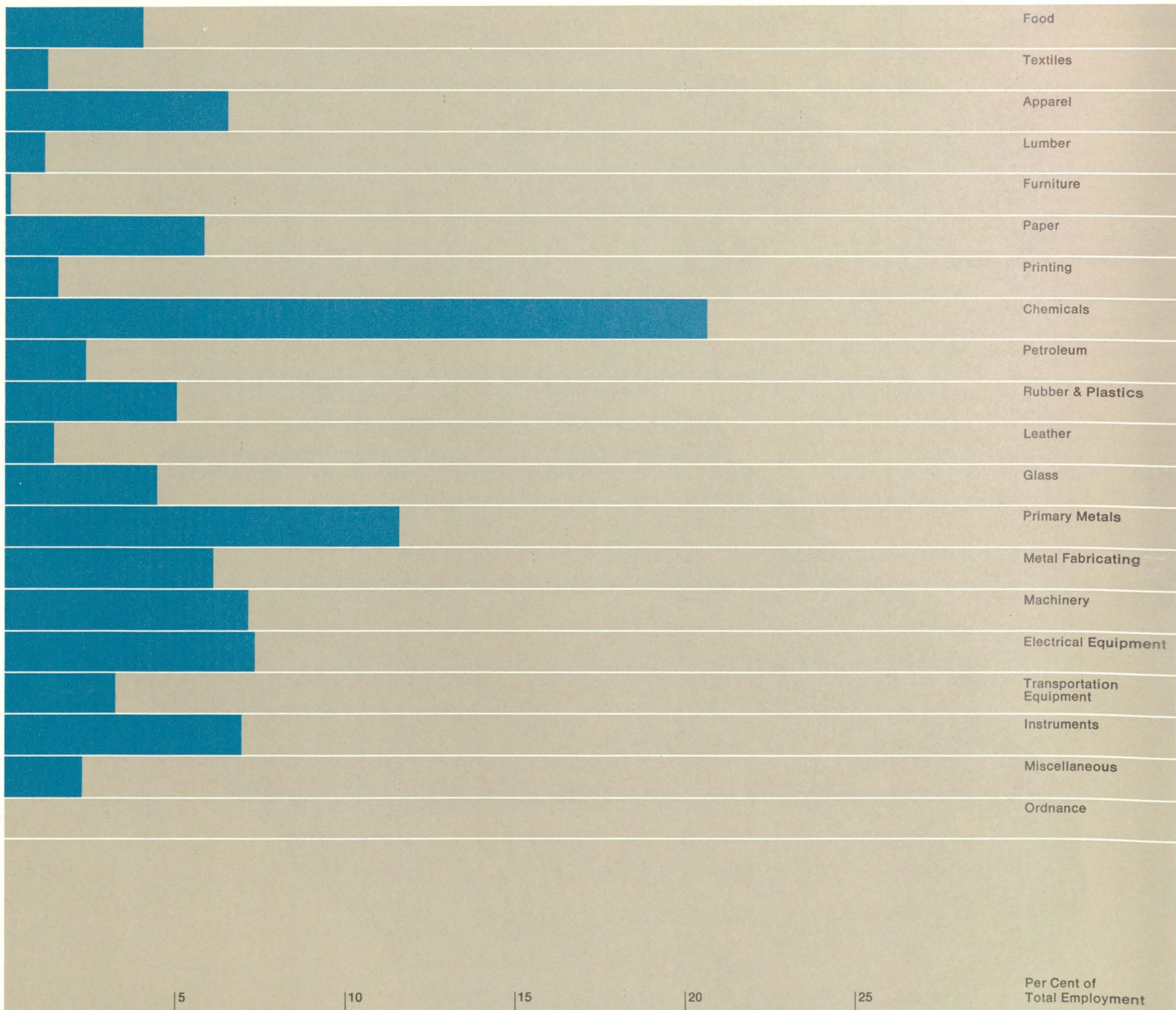
Hudson County Industrial Parks	Acreage		Number of Occupants	Improvements				Transport Orientation*					Other Data	
	Total	Unoccupied		Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			
Municipality—Name Developer											Commercial	General	Port Facility	
Bayonne—Port Jersey Industrial Center P.O. Box 5189 Building 104 Habor Drive Route 169 Bayonne, New Jersey	100	67	3	X	X	X	X	X	X	X	X	X	X	Build-to-Suit, Long-Term Lease
Jersey City—Liberty Industrial Park George J. Wolfe Realty Company 911 Bergen Avenue Jersey City, New Jersey	180	14½	15	X	X	X	X	X	X	X	X	X	X	Package Plan, Long-Term Lease, Option
Kearny—Yeskel Industrial Park Yeskel Development Company 181 Chestnut Street Newark, New Jersey	26	0	5	X	X	X	X	X	X	X	X	X	X	Lease, Sale
Secaucus—Free Zone Center Hartz Mountain Products 280 Henderson Street Jersey City, New Jersey	700	550	20	X	X	X	X	X	X	X	X	X	X	Lease Only

\*Determined by means of criteria listed on page 124.

Area in Square Miles	312
Population	584,000
Total Jobs –	215,700
In Manufacturing	81,600
Number of Plants –	851
With 20 or More Employees	471
Value of Shipments (Millions) \$	3,137.7
Value Added (Millions)	\$ 1,472.5
Capital Expenditures for New Plant & Equipment (Millions)	\$ 88.5
Central Administrative Units of Manufacturing Firms:	
Number	32
Employment	7,100



Graph 30  
Industrial Profile of Middlesex



Total Industrial Land	
Permitted Uses	Vacant and Zoned Industrial
Medium/ Heavy Industrial (Acres)	30,105
Light Industry (Acres)	12,216
Research & Office (Acres)	858
<b>Total (Acres)</b>	<b>43,179</b>

## Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
No. of Tracts	14	7	15	11	11	19	28	105
Acres	62	117	563	810	1,534	5,710	34,383	43,179

## Transportation Orientation

Acres	Freeway	Major Highway	Rail	Commercial Airport	General Airport	Port Facility	Waterfront*	
							19'-34'	9'-18'
3,407	X	X	X	X	X	X	X	
513	X	X	X	X	X	X		X
15,903	X	X	X	X	X	X		
272	X		X	X	X	X	X	
12,824	X		X	X	X	X		
7,525		X	X	X	X	X		
2,735			X	X	X	X		
<b>Total</b>								
<b>43,179</b>								

Source: Middlesex County Planning Commission.

\*Water Depth at Mean Low Tide

## Floor Space in Existing Structures, 1963\*

	Floor Space (Thousands of Square Feet)
<b>Manufacturing Activity</b>	<b>60,437</b>
Lumber	2,917
Furniture	258
Stone, clay & glass	2,278
Primary metals	4,989
Fabricated metals	5,618
Machinery, except electrical	1,688
Electrical machinery	2,497
Transportation equipment	3,240
Professional scientific equipment	1,056
Miscellaneous durables	2,475
Food	2,914
Tobacco	65
Textiles	116
Apparel	1,335
Paper	963
Printing & publishing	1,309
Chemicals	20,093
Petroleum	4,052
Rubber	2,368
Leather	206
<b>Warehousing, Trucking &amp; Wholesaling</b>	<b>9,637</b>
Warehousing	1,982
Trucking	1,584
Food wholesaling	344
Other wholesaling	5,727
<b>Total</b>	<b>70,074</b>

Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, 10 million square feet of industrial and warehouse floor space has been put in place in Middlesex County.

Middlesex County Industrial Parks Municipality—Name Developer	Acreage		Number of Occupants	Improvements				Transport Orientation*					Other Data		
	Total	Unoccupied		Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			Port Facility	
Carteret—Carteret Industrial Center Alexander Summer Company 1180 Raymond Boulevard Newark, New Jersey	60	50	10	X	X	X	X	X	X	X	X	X	X	X	Lease of Land, Build- to-Suit
Carteret—Turnpike Industrial Park— Section II Sudan Construction Company 111 South Orange Avenue South Orange, New Jersey	112	112	0	X	X	X	X	X	X	X	X	X	X	X	Long-Term Lease
Cranbury—Middlesex-Cranbury Industrial Center Louis Schlesinger Company 901 Broad Street Newark, New Jersey	400	400	0	X			X	X	X	X			X	X	Sale of Land or Build-to-Suit
East Brunswick—Central East Industrial Park David T. Houston Company 94 Academy Street Newark, New Jersey	90	37	3	X	X	X	X	X	X	X		X	X	X	Lease Only
East Brunswick—Colonial Oaks Industrial Park Joaldan, Inc. Box 176 East Brunswick, New Jersey	250	200	5	X	X	X	X	X	X			X	X	X	Build, Lease, Sell
East Brunswick—East Brunswick Industrial Park Sudan Construction Company 111 South Orange Avenue South Orange, New Jersey	70	70	0	X	X	X	X	X	X	X		X	X	X	Long-Term Lease
East Brunswick—Highview Industrial Park Co. Frank A. Greek & Son P.O. Box 732 Palisade Station Fort Lee, New Jersey	65	40	6	X	X	X	X	X	X			X	X	X	Lease Only
East Brunswick—Yeskel East Brunswick Industrial Park Yeskel Development Company 181 Chestnut Street Newark, New Jersey	65	65	0	X	X	X	X	X	X			X	X	X	Lease, Sale
Edison—Ethel Road—Edison Park James M. Rice Associates Essex Street & Route 17 Maywood, New Jersey	80	60	10	X	X	X	X	X	X			X	X	X	Turn-Key Package, Lease or Sell
Edison—Lehigh Industrial Park Frank Cardinal, Inc. Springfield, New Jersey	43	30	4	X	X	X	X	X	X	X		X	X	X	Build or Lease
Edison—Park Edison Research & Industrial W. D. Synder & Company 706 Mulligan Avenue Kennilworth, New Jersey	85	66	3	X	X	X	X	X	X			X	X	X	Lease, Sell, Build- to-Suit
Edison—Raritan Center Raritan Center, Inc. Woodbridge Avenue Newark, New Jersey	2,350	1,000	130	X	X	X	X	X	X	X		X	X	X	Flexible
Edison—Sutton Kilmer Industrial Campus Sutton Construction Company 2332 Morris Avenue Union, New Jersey	205	165	4	X	X	X	X	X	X	X		X	X	X	Build to Lease, Sell

\*Determined by means of criteria listed on page 124

Middlesex County Industrial Parks Municipality—Name Developer	Acreage			Improvements				Transport Orientation*					Other Data	
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			Port Facility
											Commercial	General		
Madison Township—Madison Township Industrial Center Messrs. Gold and Burnstyn P.O. Box 67 Lawrence Harbor, New Jersey	138	110	9	X	X		X	X	X	X	X	X	X	Build, Lease or Sell
Madison Township—Madison Township Industrial Park Mahony-Troast Construction Company 790 Bloomfield Avenue Clifton, New Jersey	140	119	2	X	X	X	X	X	X	X	X	X	X	Complete Package, Sale or Lease
Metuchen—Edward A. Cantor Industrial Park #7 Edward A. Cantor Affiliated Interests 1203 W. St. George Avenue Linden, New Jersey	29	0	8	X	X	X	X	X	X	X	X	X	X	Lease Only
Metuchen—Interchange Industrial Plaza Gross Development Corporation 24 Commerce Street Newark, New Jersey	42	42	0	X	X	X	X	X	X	X	X	X	X	Package Plan, Sale and Lease
Monroe Township—Hanovia Industrial Development Engelhard Enterprises, Inc. 54 Austin Street Newark, New Jersey	1,550	1,500	1	X	X	X	X	X	X	X		X	X	Sell, Lease, Build-to-Suit
North Brunswick—Manor-North Brunswick Industrial District Penn-Central Transportation Company 370 7th Avenue, Room 500 New York, New York	616	460	3	X	X	X	X	X	X	X	X	X	X	Consider Lease-Back Arrangement
North Brunswick—North Brunswick Industrial Park Sudler Construction 44 Clinton Street Newark, New Jersey	120	60	5	X	X	X	X	X	X	X	X	X	X	Lease or Build-to-Suit
Piscataway—Centennial Industrial Park Murray Construction Company 51 Commerce Street Springfield, New Jersey	176	140	3	X	X	X	X	X	X		X	X	X	Sell, Lease, Build-to-Suit
Piscataway—Piscataway Park James M. Rice Associates Essex Street & Route 17 Maywood, New Jersey	26	0	2	X	X	X	X	X			X	X		Turn-key Package, Minimum 5 Acres, 50 Per cent Coverage
Piscataway—Rutgers Industrial Center Meyer Segal, Inc. 730 Broad Street Newark, New Jersey	300	200	6	X	X	X	X	X		X	X	X		Build-to-Suit, Lease
Sayreville—Crossman Industrial Park Crossman Company Main Street Sayreville, New Jersey	117	40	3	X	X	X	X	X	X	X	X	X	X	Sell, Lease
South Brunswick—Hanovia Industrial Park Engelhard Enterprises, Inc. 54 Austin Street Newark, New Jersey	444	440	1	X	X	X	X	X	X	X		X	X	Turn-key Package, Rent, Sell, Lease, Option

\*Determined by means of criteria listed on page 124

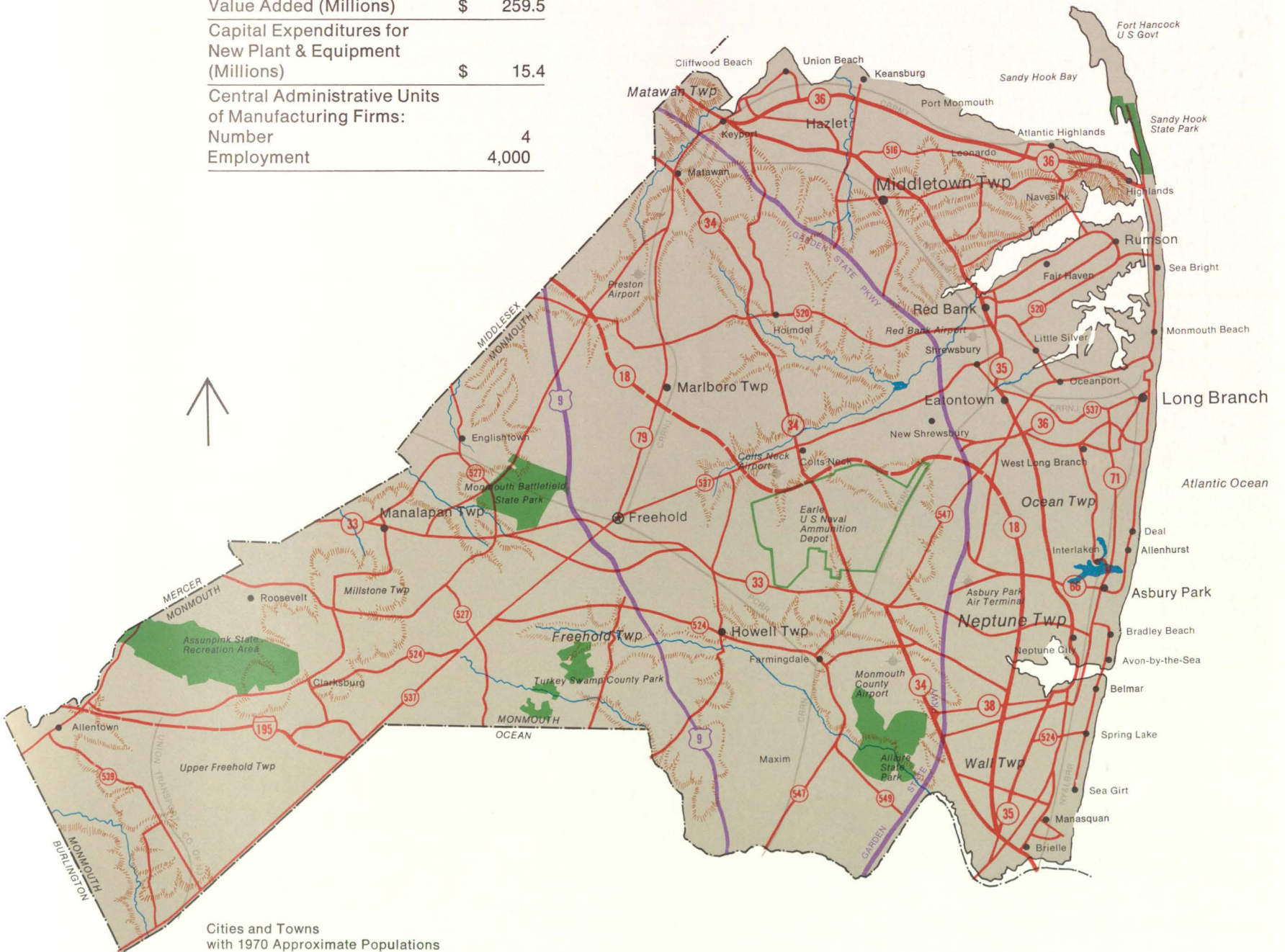
## Middlesex County

Middlesex County Industrial Parks Municipality—Name Developer	Acreage			Improvements				Transport Orientation*					Other Data	
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			Port Facility
											Commercial	General		
South Brunswick—Mainland Industrial Park Sudan Construction Company 111 South Orange Avenue South Orange, New Jersey	112	112	0	X	X	X	X	X	X	X	X	X	X	Lease, Sell, Build-to-Suit
South Brunswick—Mid-Point Industrial Park David Cronheim Company & Frank Briscoe Company 900 Broad Street Newark, New Jersey	216	216	0	X	X	X	X	X	X	X	X	X	X	Package Plan, Sell Land or Lease
South Brunswick—South Brunswick Center Louis Schlesinger Company 901 Broad Street Newark, New Jersey	100	100	0	X	X		X	X			X	X	X	Lease-Back, Build-to-Suit
South Plainfield—Engelhard Industrial Park Engelhard Enterprises, Inc. 54 Austin Street Newark, New Jersey	250	150	2	X	X	X	X	X	X			X	X	Lease, Sell
South Plainfield—Hamilton Industrial Park Newark Paraffine Paper Company—C. R. D. Realty 70 Blanchard Street Newark, New Jersey	33	15	18	X	X	X	X	X	X	X	X	X	X	Sell or Lease, Build-to-Suit
South Plainfield—Interstate Route 287 Industrial Center South Plainfield Associates Hamilton Boulevard South Plainfield, New Jersey	100	60	8	X	X	X	X	X	X	X	X	X	X	Sell, Lease
South Plainfield—New Era Industrial Park J. B. De Andrea 1522 Park Avenue South Plainfield, New Jersey	80	50	50	X	X	X	X	X	X		X	X	X	Sell, Lease, Build-to-Suit
South Plainfield—South Plainfield Industrial Center Louis Schlesinger Company 901 Broad Street Newark, New Jersey	45	45	1	X	X	X	X	X	X		X	X	X	Lease, Sell, Build-to-Suit
Woodbridge—Woodbridge-Middlesex Industrial Park Engelhard Hanovia, Inc. 54 Austin Street Newark, New Jersey	165	15	10	X	X	X	X	X	X	X	X	X	X	Sell Land, Build Plants and Lease

\*Determined by means of criteria listed on page 124

Monmouth County

Area in Square Miles	477
Population	459,000
Total Jobs –	146,400
In Manufacturing	24,900
Number of Plants –	519
With 20 or More Employees	187
Value of Shipments (Millions) \$	454.8
Value Added (Millions) \$	259.5
Capital Expenditures for New Plant & Equipment (Millions)	\$ 15.4
Central Administrative Units of Manufacturing Firms:	
Number	4
Employment	4,000

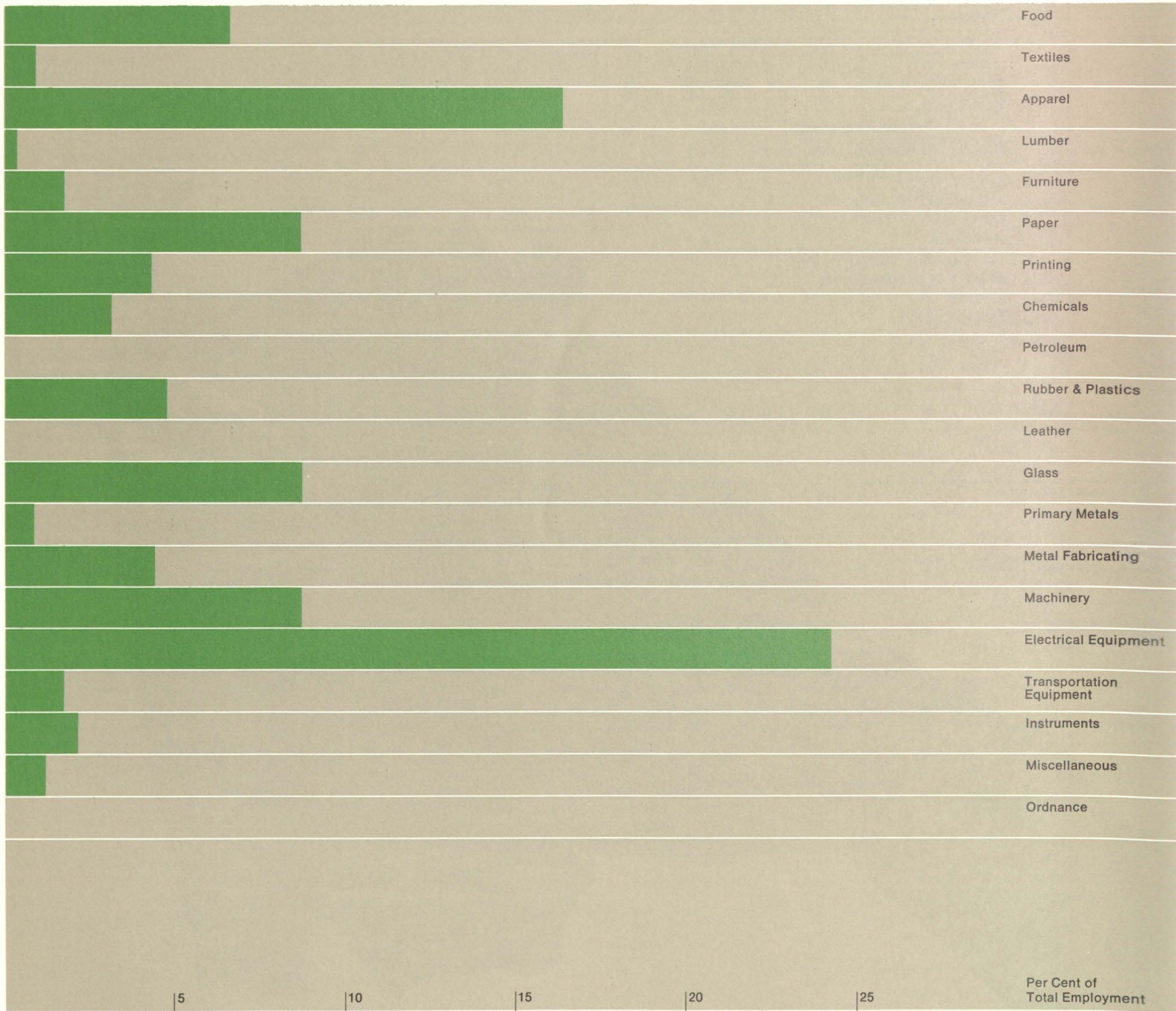


Cities and Towns  
with 1970 Approximate Populations

Under 10,000	●	Over 100,000	●	City
10,000-25,000	●			
25,000-100,000	●	County Seat	⊗	

0 1 2 Miles

Graph 31  
Industrial Profile of Monmouth



Total Industrial Land				
Permitted Uses	Vacant & Zoned Industrial	Vacant, Not Zoned But Suitable	Redevelopment Land	Total
Medium/ Heavy Industrial (Acres)			—	
Light Industry (Acres)			—	
Warehousing & Distribution (Acres)			12	
Total of Above	19,702	424	12	20,138
Research & Office (Acres)	4,039	1,284	—	5,323
Total (Acres)	23,741	1,708	12	25,461

Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
Vacant and Zoned Industrial								
No. of Tracts	1	18	23	44	38	26	10	160
Acres	9	327	899	3,337	5,312	7,369	6,488	23,741

Vacant, Not Zoned But Suitable

No. of Tracts	—	—	—	3	2	1	2	8
Acres	—	—	—	186	320	233	969	1,708

Redevelopment Land

No. of Tracts	4	—	—	—	—	—	—	4
Acres	12	—	—	—	—	—	—	12

Total

No. of Tracts	5	18	23	47	40	27	12	172
Acres	21	327	899	3,523	5,632	7,602	7,457	25,461

Transportation Orientation

Acres	Freeway	Major Highway	Rail	Commercial Airport	General Airport	Port Facility
3,891	X	X	X	X	X	X
6,029	X	X		X	X	X
2,918	X			X	X	X
193		X	X	X	X	X
762	X	X		X		X
7,163	X		X	X		X
1,562	X			X		X
2,006			X	X		X
464				X		X
426		X		X	X	X
47				X	X	X
Total 25,461						

Source: Monmouth County Planning Board.

Floor Space in Existing Structures, 1963\*

	Floor Space (Thousands of Square Feet)
Manufacturing Activity	7,175
Lumber	318
Furniture	201
Stone, clay & glass	308
Primary metals	41
Fabricated metals	898
Machinery, except electrical	588
Electrical machinery	850
Transportation equipment	26
Professional scientific equipment	652
Miscellaneous durables	516
Food	1,051
Tobacco	—
Textiles	88
Apparel	737
Paper	175
Printing & publishing	388
Chemicals	51
Petroleum	88
Rubber	166
Leather	33
Warehousing, Trucking & Wholesaling	3,141
Warehousing	1,118
Trucking	269
Food wholesaling	366
Other wholesaling	1,388
Total	10,316

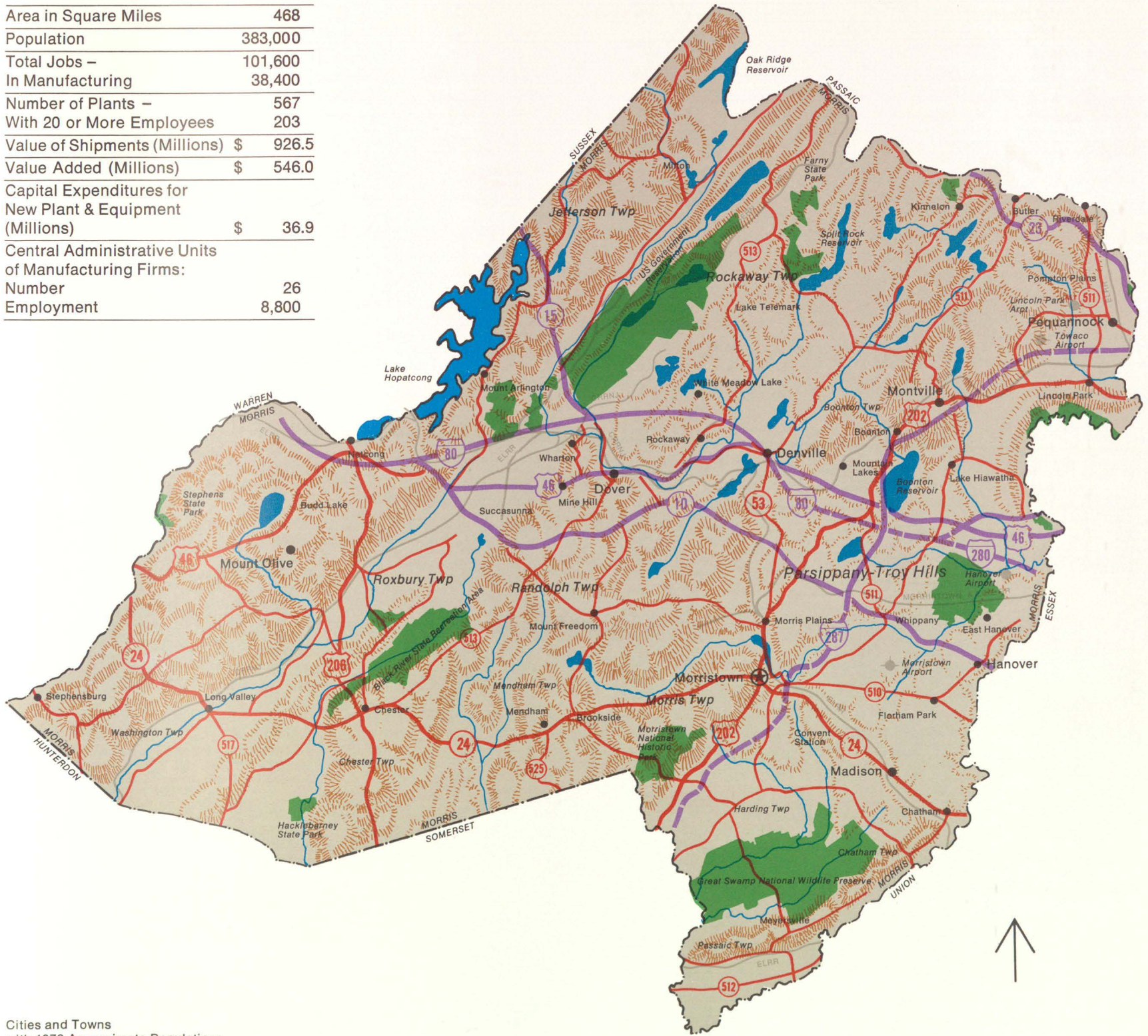
Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, 2.6 million square feet of industrial and warehouse floor space has been put in place in Monmouth County.

Monmouth County Industrial Parks Municipality—Name Developer	Acreage			Improvements				Transport Orientation*					Other Data	
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport Commercial General			Port Facility
Freehold Township—Freehold Plaza, Inc. Leslie Bian Company 50 Commerce Street Newark, New Jersey	48	48	0						X			X		Sell, Lease, Build-to-Suit
Marlboro—Marlboro Industrial Park Edna M. Netter, Broker Dutch Lane Road Marlboro, New Jersey	180	40	6	X		X	X		X			X	X	Build-to-Suit, Sell, Lease
New Shrewsbury—Mid-Monmouth Industrial Park Rachlin & Company & Sudler Construction 17 Academy Street Newark, New Jersey	100	60	10	X	X	X	X	X	X			X	X	Will Design, Construct & Lease, Option
New Shrewsbury—Parcaro Industrial Park International Development Corporation Jumping Brook & Essex Roads New Shrewsbury, New Jersey	50	35	2	X		X	X	X	X			X		Lease Only
Wall Township—Aero Industrial Center Raymond Smith Realty Group, Inc. 588 Shrewsbury Avenue New Shrewsbury, New Jersey	100	80	1	X			X	X	X			X		Build-to-Suit, Sell, Lease
Wall Township—Circle Plaza Industrial Park Gross Development Corporation 24 Commerce Street Newark, New Jersey	130	130	0	X		X	X		X			X		Package Plan, Sell, Lease, Land Sales
Wall Township—Monmouth Airport Wall Herald Corporation Highway 34 Wall Township, New Jersey	880	680	35	X		X	X		X			X		Financing Available

\*Determined by means of criteria listed on page 124

Area in Square Miles	468
Population	383,000
Total Jobs -	101,600
In Manufacturing	38,400
Number of Plants -	567
With 20 or More Employees	203
Value of Shipments (Millions) \$	926.5
Value Added (Millions) \$	546.0
Capital Expenditures for New Plant & Equipment (Millions) \$	36.9
Central Administrative Units of Manufacturing Firms:	
Number	26
Employment	8,800

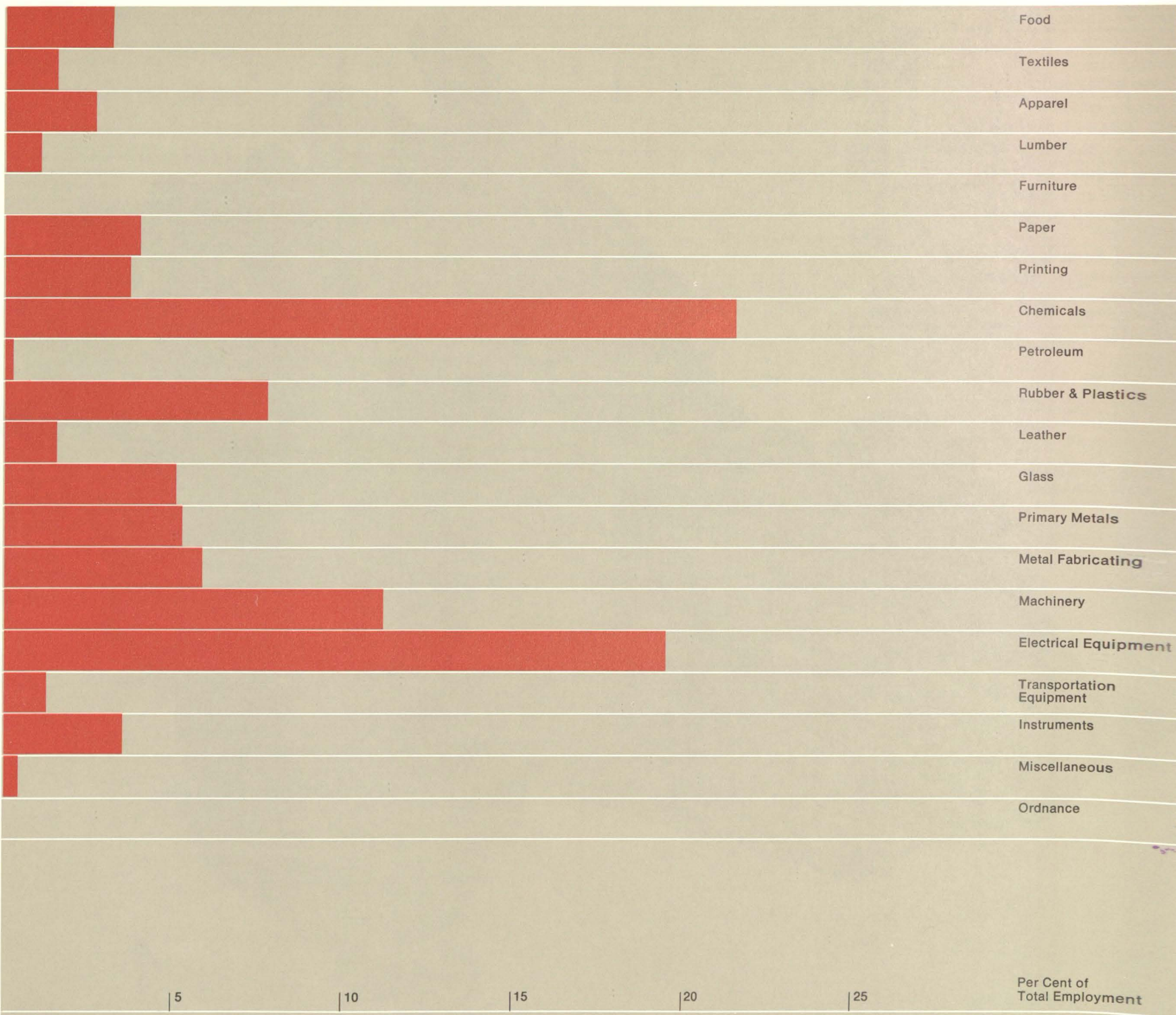


Cities and Towns with 1970 Approximate Populations

- |                |   |              |      |
|----------------|---|--------------|------|
| Under 10,000   | ● | Over 100,000 | City |
| 10,000-25,000  | ● |              |      |
| 25,000-100,000 | ● | County Seat  | ⊕    |

0 | 1 | 2 | Miles

Graph 32  
Industrial Profile of Morris



## Total Industrial Land

	Permitted Uses
Vacant and Zoned Industrial	General Industrial (Acres) 31,176.0

## Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
No. of Tracts	13	12	23	26	40	29	18	161
Acres	94.6	223.4	853.3	1,758.1	5,861.9	8,622.7	13,762.0	31,176.0

## Transportation Orientation

Acres	Freeway	Major Highway	Rail	Commercial Airport	General Airport	Port Facility
1,710.6	X	X	X	X	X	X
7,035.7	X	X	X	X	X	
551.7	X	X		X	X	X
1,046.0	X		X	X	X	X
2,718.9	X		X	X	X	
828.4	X			X	X	X
66.1	X			X	X	
4,303.1		X	X	X	X	X
3,652.6		X	X	X	X	
1,194.9		X		X	X	X
822.3		X		X	X	
3,901.6			X	X	X	X
2,332.5			X	X	X	
974.9				X	X	X
36.7				X	X	
Total						
31,176.0						

Source: Morris County Planning Board.

## Floor Space in Existing Structures, 1963\*

	Floor Space (Thousands of Square Feet)
Manufacturing Activity	13,039
Lumber	393
Furniture	126
Stone, clay & glass	334
Primary metals	1,044
Fabricated metals	417
Machinery, except electrical	584
Electrical machinery	1,093
Transportation equipment	25
Professional scientific equipment	760
Miscellaneous durables	1,069
Food	230
Tobacco	—
Textiles	11
Apparel	479
Paper	384
Printing & publishing	260
Chemicals	4,341
Petroleum	448
Rubber	1,041
Leather	—
Warehousing, Trucking & Wholesaling	2,216
Warehousing	1,112
Trucking	219
Food wholesaling	136
Other wholesaling	749
Total	15,255

Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, almost 6 million square feet of industrial and warehouse floor space has been put in place in Morris County.

Morris County Industrial Parks Municipality—Name Developer	Acreage		Improvements				Transport Orientation*					Airport		Other Data
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Commercial	General	Port Facility	
Denville—Central Morris Industrial Park C.R.R. of New Jersey 1100 Raymond Boulevard Newark, New Jersey	175	135	5	X	X	X	X	X	X	X		X		Sell
Denville—Denville Industrial Park Louis Schlesinger Company 901 Broad Street Newark, New Jersey	50	50	0	X	X	X	X	X	X			X		Sell, Lease
Florham Park—Florham Park Industrial Mall United Advertising Corporation 354 Park Avenue Newark, New Jersey	165	165	0	X	X	X	X		X		X	X	X	Sell, Lease
Hanover—Bell Plaza Office & Industrial Park Gross Development Corporation 24 Commerce Street Newark, New Jersey	100	100	0	X	X	X	X	X	X	X	X	X	X	Package Plan, Sell or Lease
Hanover—Hanover Park for Industry, Inc. J. I. Kislak, Inc. 581 Broad Street Newark, New Jersey	80	30	7	X	X	X	X	X	X		X	X	X	Lease, Sell, Build- to-Suit
Hanover—Saw Mill Center Joseph J. Garibaldi Organization 77 River Street Hoboken, New Jersey	242	242	0	X	X	X	X	X	X		X	X		Will Develop Land, Sell, Lease
Mount Olive—Jersey West Industrial Park Louis Schlesinger Company 901 Broad Street Newark, New Jersey	150	150	0	X	X		X	X	X			X		Sell, Lease
Mount Olive—Mount Olive Industries Weny Brothers & Storms Company McLean Boulevard Paterson, New Jersey	260	260	0					X	X			X		Sell, Lease
Parsippany-Troy Hills—Fox Hills Industrial Development David Houston Company 94 Academy Street Newark, New Jersey	140	120	2	X	X	X	X	X	X	X	X	X	X	Package Plan, Sell, Lease, 5 Acre Minimum
Parsippany-Troy Hills—Route 287 Industrial Park Weny Brothers & Storms Company McLean Boulevard Paterson, New Jersey	100	7	13	X	X	X	X	X	X			X	X	Package Plan, Sell, Lease-Back

\*Determined by means of criteria listed on page 124

Morris County Industrial Parks	Acreage		Improvements				Transport Orientation*					Other Data		
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			
Municipality—Name Developer											Commercial	General	Port Facility	
Randolph Township—Randolph Industrial Park Andrew H. Emery Route 10 Dover, New Jersey	50	25	7	X		X	X	X	X			X		Build-to-Suit, Lease
Rockaway-Denville Township—Central Morris Industrial Park James M. Rice Associates Essex Street & Route 17 Maywood, New Jersey	175	160	4	X	X	X	X	X	X			X		Build-to-Suit, Sell, Lease
Roxbury—Roxbury Industrial Development United Advertising Corporation 354 Park Avenue Newark, New Jersey	115	115	0	X	X	X	X		X	X		X		Build-to-Suit, Sell, Lease
Roxbury—Sutton Roxbury Industrial Park C/O Sutton Construction 2332 Morris Avenue Union, New Jersey	165	115	6	X	X	X	X		X	X		X		Package Plan, Sell or Lease

\*Determined by means of criteria listed on page 124

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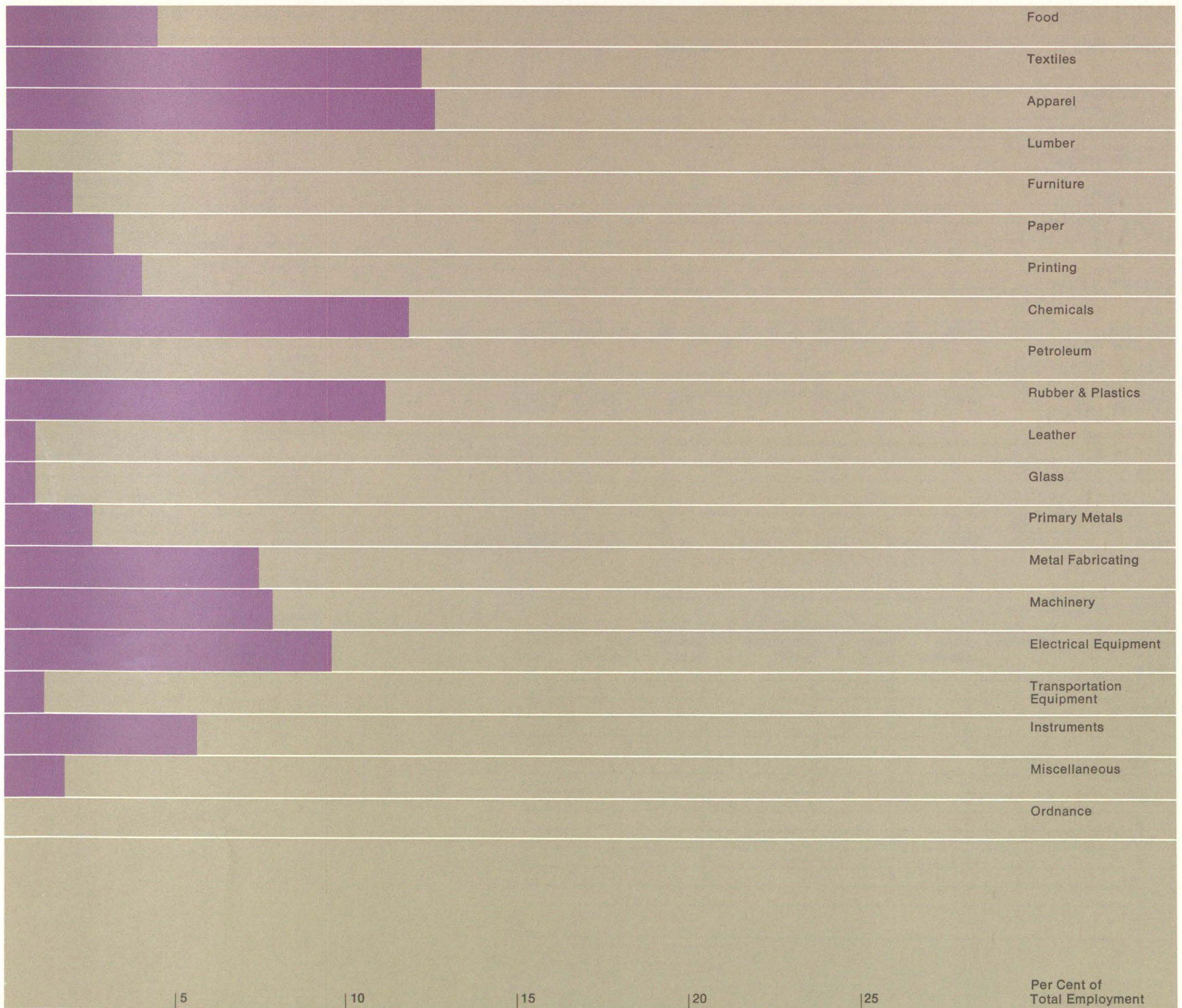


Area in Square Miles	194
Population	461,000
Total Jobs -	205,200
In Manufacturing	82,800
Number of Plants -	1,599
With 20 or More Employees	680
Value of Shipments (Millions) \$	1,944.3
Value Added (Millions)	\$ 1,037.2
Capital Expenditures for New Plant & Equipment (Millions)	\$ 52.7
Central Administrative Units of Manufacturing Firms:	
Number	20
Employment	3,500

Cities and Towns  
with 1970 Approximate Populations

Under 10,000 ● Over 100,000 City  
 10,000-25,000 ●  
 25,000-100,000 ● County Seat ⊕

Graph 33  
Industrial Profile of Passaic



Passaic County

Total Industrial Land

Permitted Uses	Vacant & Zoned Industrial	Redevelopment Land	Total
Medium/ Heavy Industrial (Acres)	3,569.2	—	3,569.2
Light Industry (Acres)	1,022.9	—	1,022.9
Warehousing and Distribution (Acres)	318.4	—	318.4
Research & Office (Acres)	339.8	3.3	343.1
<b>Total (Acres)</b>	<b>5,250.3</b>	<b>3.3</b>	<b>5,253.6</b>

Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
<b>Vacant &amp; Zoned Industrial</b>								
No. of Tracts	95	20	7	4	2	3	3	134
Acres	346.4	319.2	250.8	293.3	254.0	840.0	2,946.6	5,250.3
<b>Redevelopment Land</b>								
No. of Tracts	3	—	—	—	—	—	—	3
Acres	3.3	—	—	—	—	—	—	3.3
<b>Total</b>								
No. of Tracts	98	20	7	4	2	3	3	137
Acres	349.7	319.2	250.8	293.3	254.0	840.0	2,946.6	5,253.6

Transportation Orientation

Acres	Freeway	Major Highway	Rail	Commercial Airport	General Airport	Port Facility	Water Front* 9'-18'
76.9	X	X	X	X	X	X	X
224.9	X	X	X	X	X	X	
33.5	X	X	X		X	X	
97.2	X	X		X	X	X	
3.5	X		X	X	X	X	
36.2		X	X	X	X	X	
15.0	X	X			X		
57.8		X	X		X		
27.3		X	X				
5.0		X			X		
732.8			X		X		
3,943.5					X		
<b>Total</b>							
<b>5,253.6</b>							

Source: Passaic County Planning Board.

\*Water depth at mean low tide

Floor Space in Existing Structures, 1963\*

	Floor Space (Thousands of Square Feet)
<b>Manufacturing Activity</b>	<b>45,134</b>
Lumber	698
Furniture	1,576
Stone, clay & glass	613
Primary metals	1,178
Fabricated metals	3,322
Machinery, except electrical	4,153
Electrical machinery	3,869
Transportation equipment	557
Professional scientific equipment	750
Miscellaneous durables	2,280
<b>Food</b>	<b>1,465</b>
Tobacco	1
Textiles	3,186
Apparel	4,626
Paper	3,139
Printing & publishing	1,274
Chemicals	7,651
Petroleum	44
Rubber	4,540
Leather	212
<b>Warehousing, Trucking &amp; Wholesaling</b>	<b>7,418</b>
Warehousing	3,652
Trucking	721
Food wholesaling	837
Other wholesaling	2,208
<b>Total</b>	<b>52,552</b>

Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, over 4 million square feet of industrial and warehouse floor space has been put in place in Passaic County.

Passaic County Industrial Parks Municipality—Name Developer	Acreage			Improvements				Transport Orientation*					Other Data	
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			Port Facility
Totowa—Riverview Industrial Park Mahony-Troast Construction Company 790 Bloomfield Avenue Clifton, New Jersey	35	10	7	X	X	X	X	X	X	X	X	X	X	Complete Package, Sell, Lease
Totowa—Totowa Industrial Center McBride Enterprises 808 High Mountain Road Franklin Lakes, New Jersey	44	5	12	X	X	X	X	X	X			X	X	Package Plan, Sell, Lease
Wayne—Wayne Industrial Park Mahony-Troast Construction Company 790 Bloomfield Avenue Clifton, New Jersey	42	30	3	X	X	X	X	X	X			X	X	Complete Package, Sell, Lease
Wayne—Urban Wayne Office & Research Park McBride Enterprises 808 High Mountain Road Franklin Lakes, New Jersey	500	440	3	X	X	X	X	X	X			X	X	Turn-Key Package
West Milford—West Milford Industrial Park C & B Development Corporation Marshall Hill Road West Milford, New Jersey	200	150	8	X	X	X	X	X	X				X	Financing Available, Lease, Sell

\*Determined by means of criteria listed on page 124

Area in Square Miles	307
Population	198,000
Total Jobs –	61,000
In Manufacturing	28,600
Number of Plants –	221
With 20 or More Employees	95
Value of Shipments (Millions) \$	568.3
Value Added (Millions) \$	329.1
Capital Expenditures for New Plant & Equipment (Millions)	\$ 36.2
Central Administrative Units of Manufacturing Firms:	
Number	9
Employment	6,200

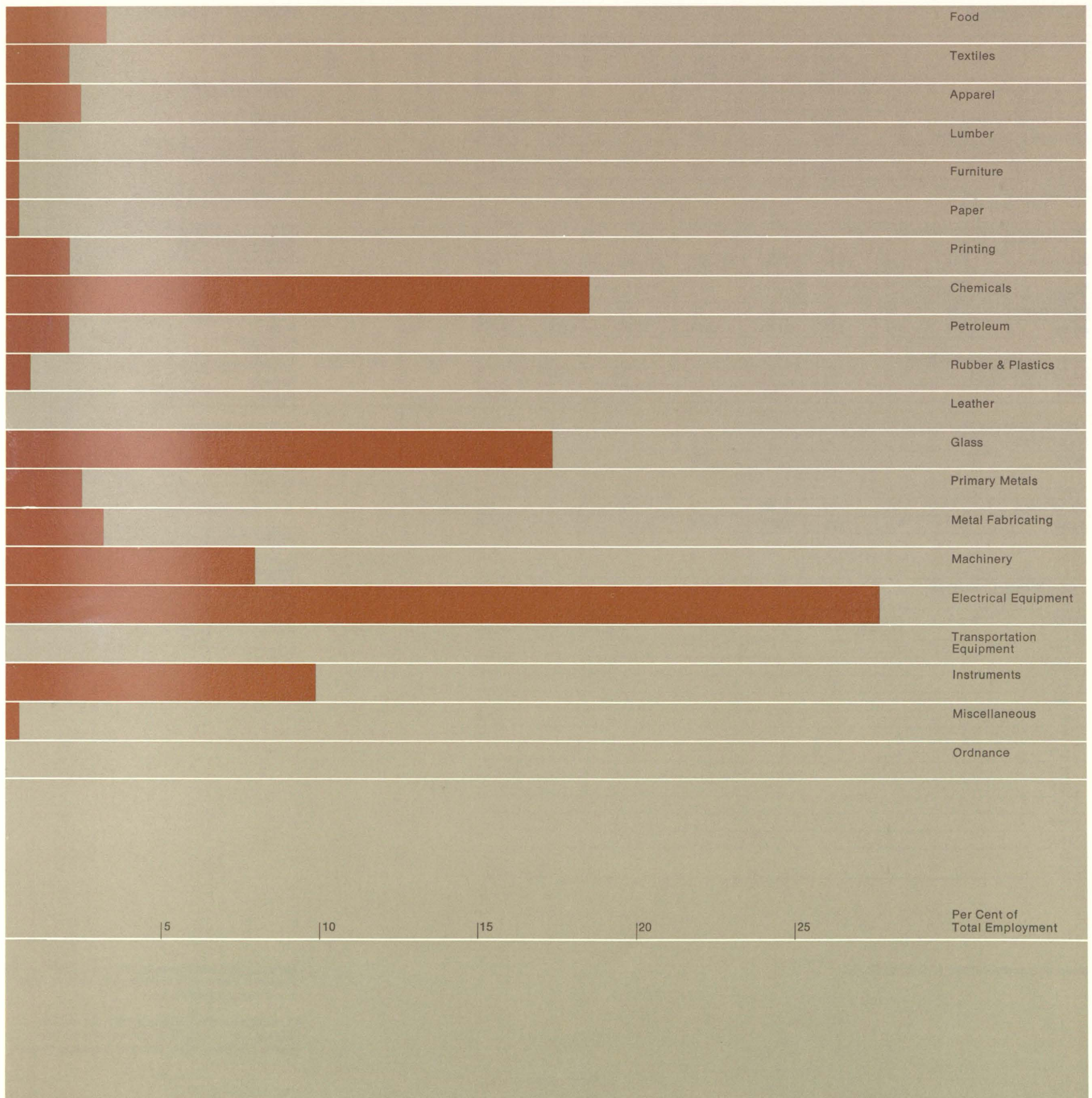


Cities and Towns  
with 1970 Approximate Populations

Under 10,000	●	Over 100,000	City
10,000-25,000	●		
25,000-100,000	●	County Seat	★

0 | 1 | 2 | Miles

Graph 34  
Industrial Profile of Somerset



## Total Industrial Land

Permitted Uses	Vacant & Zoned Industrial	Vacant, Not Zoned But Suitable	Redevelopment Land	Total
Medium/ Heavy Industrial (Acres)	1,328	—	—	1,328
Light Industry (Acres)	10,660	1,065	—	11,725
Research & Office (Acres)	3,485	500	160	4,145
<b>Total (Acres)</b>	<b>15,473</b>	<b>1,565</b>	<b>160</b>	<b>17,198</b>

## Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
<b>Vacant &amp; Zoned Industrial</b>								
No. of Tracts	37	30	27	27	24	13	7	165
Acres	212	514	972	1,772	3,858	3,630	4,515	15,473
<b>Vacant, Not Zoned But Suitable</b>								
No. of Tracts	—	—	—	1	—	5	—	6
Acres	—	—	—	65	—	1,500	—	1,565
<b>Redevelopment Land</b>								
No. of Tracts	—	—	—	—	4	—	—	4
Acres	—	—	—	—	160	—	—	160
<b>Total</b>								
No. of Tracts	37	30	27	28	28	18	7	175
Acres	212	514	972	1,837	4,018	5,130	4,515	17,198

## Transportation Orientation

Acres	Freeway	Major Highway	Rail	Commercial Airport	General Airport	Port Facility
537	X	X	X		X	
1,962	X	X			X	
350	X			X	X	X
537	X			X	X	
1,823	X				X	
500		X	X	X	X	
820		X	X		X	
310		X		X	X	X
2,605		X		X	X	
5,197		X			X	
1,495			X		X	
1,062					X	
<b>Total</b>						
17,198						

Source: Somerset County Planning Board.

## Floor Space in Existing Structures, 1963\*

	Floor Space (Thousands of Square Feet)
<b>Manufacturing Activity</b>	<b>12,482</b>
Lumber	78
Furniture	111
Stone, clay & glass	2,310
Primary metals	29
Fabricated metals	219
Machinery, except electrical	351
Electrical machinery	174
Transportation equipment	392
Professional scientific equipment	12
Miscellaneous durables	477
Food	155
Tobacco	36
Textiles	174
Apparel	50
Paper	74
Printing & publishing	228
Chemicals	6,099
Petroleum	54
Rubber	1,459
Leather	—
<b>Warehousing, Trucking &amp; Wholesaling</b>	<b>972</b>
Warehousing	674
Trucking	70
Food wholesaling	39
Other wholesaling	189
<b>Total</b>	<b>13,454</b>

Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, 2.4 million square feet of industrial and warehouse floor space has been put in place in Somerset County.

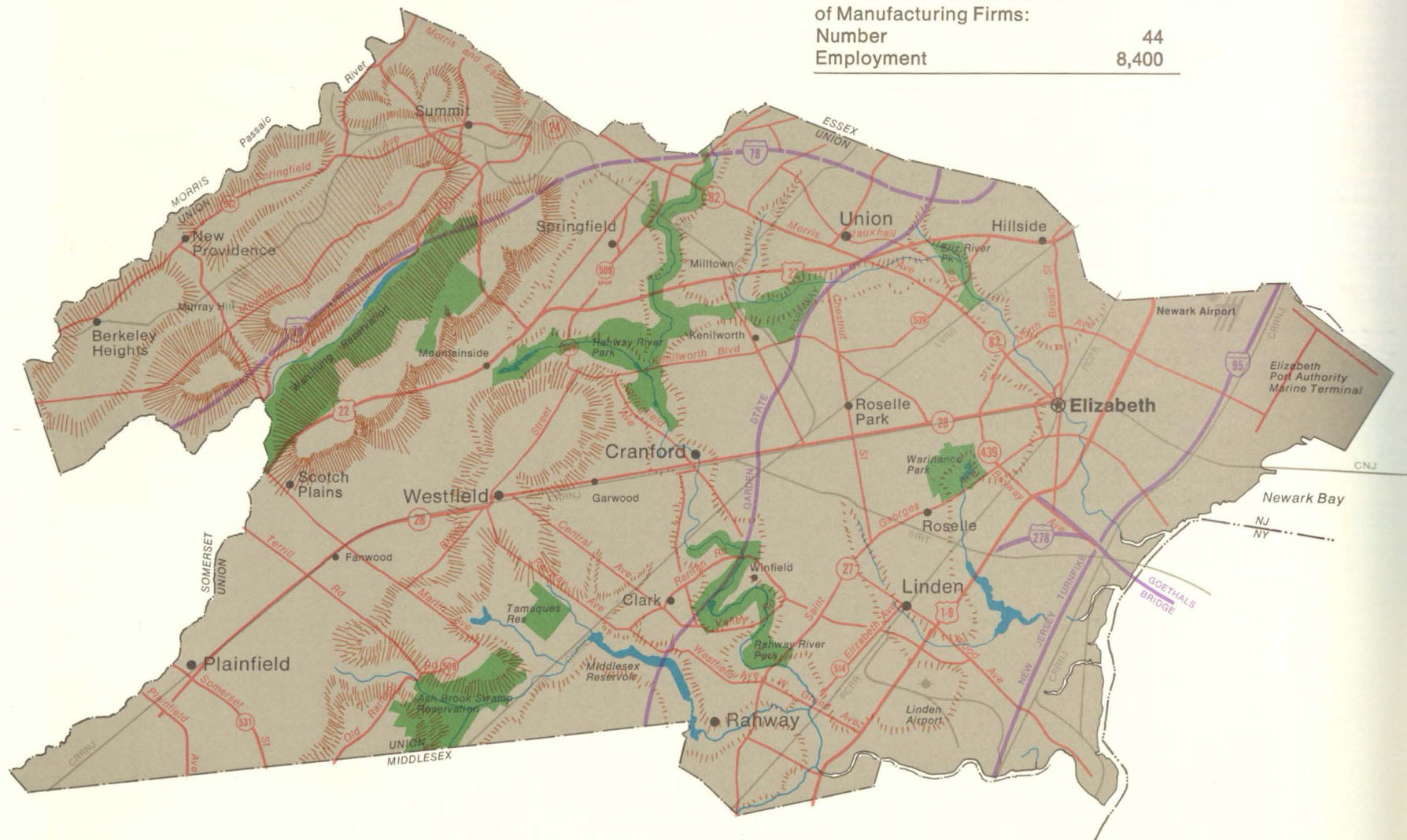
## Somerset County

Somerset County Industrial Parks Municipality—Name Developer	Acreage		Improvements				Transport Orientation*					Other Data		
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport Commercial General Port Facility			
Bound Brook—Central Jersey Industrial Park Chandler Realty Company Bound Brook, New Jersey	160	0	33	X	X		X	X				X	X	Lease Only
Franklin Township—Deerwood Industrial Park, Inc. Sisler Brothers Construction Company Somerset, New Jersey	31	13	6	X	X	X	X		X	X		X	X	Financing, Lease Land and Bldg., Sell
Franklin Township—Franklin Industrial Park Country Land Industries 810 Broad Street Newark, New Jersey	160	100	2	X	X	X	X	X	X			X	X	Lease, Sell, Build-to-Suit
Franklin Township—Somerset Valley Industrial Campus Horace C. Shuman 752 Elizabeth Avenue Somerset, New Jersey	320	224	11	X	X	X	X		X			X	X	Package Plan, Sell, Lease, Build-to-Suit
Montgomery Township—Bellemead Industrial Park Bellemead Development Corporation 1099 Wall Street, West Lyndhurst, New Jersey	1,200	1,200	0	X	X		X	X	X	X	X	X	X	Build-to-Suit, Sell, Lease
North Branch—North Branch Industrial Park Herbert Vollers Route 22, Box 157A Somerville, New Jersey	200	180	6	X	X	X	X		X	X		X		Sell, Lease, Build-to-Suit

\*Determined by means of criteria listed on page 124

Union County

Area in Square Miles	103
Population	543,000
Total Jobs –	261,100
In Manufacturing	101,700
Number of Plants –	1,453
With 20 or More Employees	655
Value of Shipments (Millions) \$	3,901.0
Value Added (Millions)	\$ 1,762.2
Capital Expenditures for New Plant & Equipment (Millions)	\$ 121.6
Central Administrative Units of Manufacturing Firms:	
Number	44
Employment	8,400

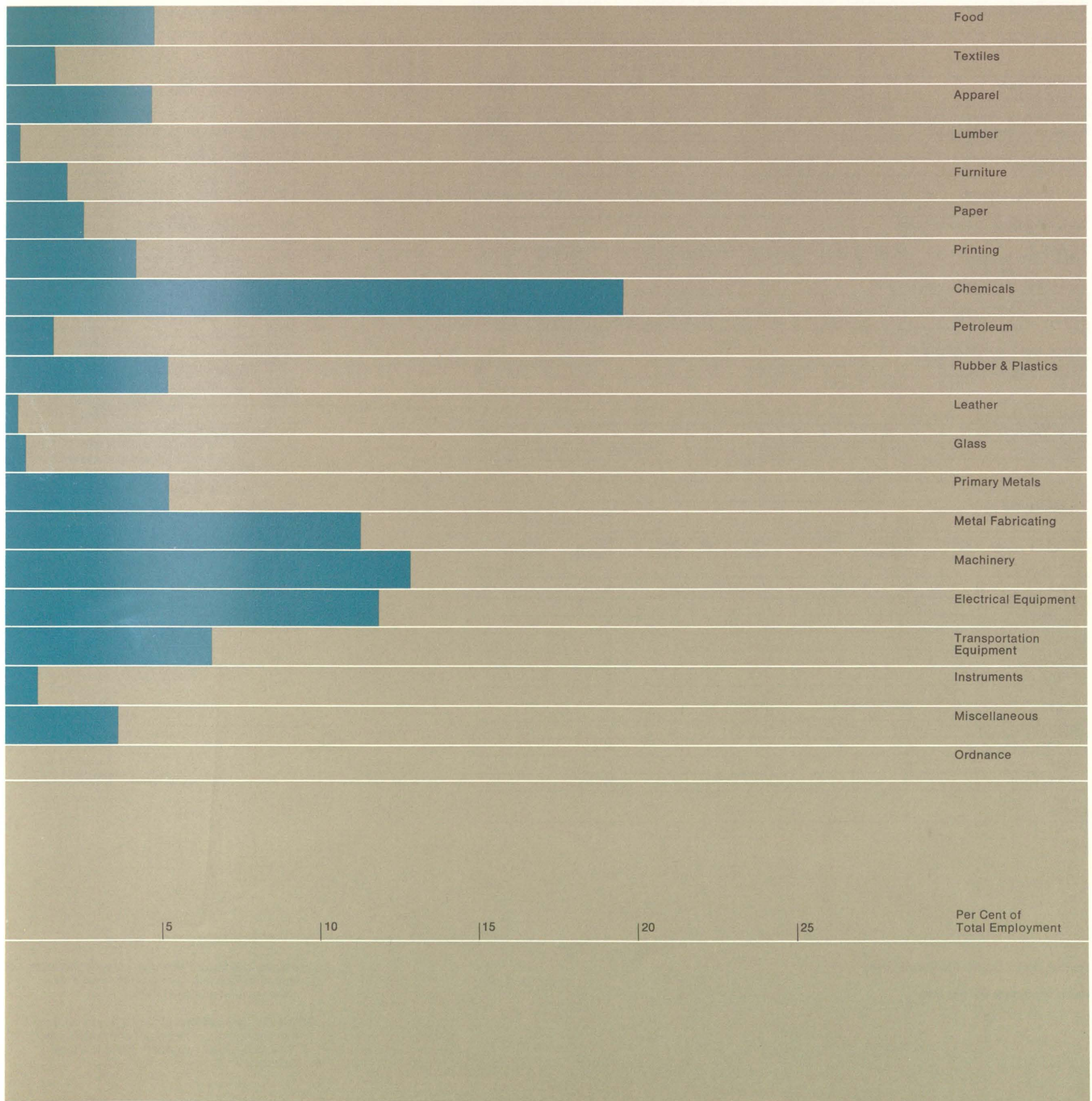


Cities and Towns  
with 1970 Approximate Populations

Under 10,000	•	Over 100,000	City
10,000-25,000	•		
25,000-100,000	•	County Seat	⊗

0 | 1 | 2 | Miles

Graph 35  
Industrial Profile of Union



Union County

Total Industrial Land			
Permitted Uses	Vacant & Zoned Industrial	Vacant, Not Zoned But Suitable	Total
Medium/ Heavy Industrial (Acres)	1,785.9	101.1	1,887.0
Light Industry (Acres)	1,229.1	50.5	1,279.6
Research & Office (Acres)	375.9	—	375.9
<b>Total (Acres)</b>	<b>3,390.9</b>	<b>151.6</b>	<b>3,542.5</b>

Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
<b>Vacant and Zoned Industrial</b>								
No. of Tracts	71	23	7	6	4	4	1	116
Acres	267.5	357.4	270.2	347.1	581.2	1,090.9	476.6	3,390.9
<b>Vacant, Not Zoned But Suitable</b>								
No. of Tracts	3	5	2	—	—	—	—	10
Acres	12.0	86.3	53.3	—	—	—	—	151.6
<b>Total</b>								
No. of Tracts	74	28	9	6	4	4	1	126
Acres	279.5	443.7	323.5	347.1	581.2	1,090.9	476.6	3,542.5

Transportation Orientation

Acres	Freeway	Major Highway	Rail	Commercial Airport	General Airport	Port Facility	Water Front* 35' or More
449.9	X	X	X	X	X	X	
346.7	X	X		X	X	X	
539.0	X		X	X	X	X	X
1,133.7	X		X	X	X	X	
40.3		X	X	X	X	X	
145.4	X		X	X	X	X	
468.7	X			X	X	X	
6.1		X		X	X	X	
365.3	X			X		X	
7.1			X	X		X	
12.8				X	X	X	
27.5				X		X	
<b>Total</b>							
3,542.5							

Source: Union County Planning Board.

\*Water depth at mean low tide

Floor Space in Existing Structures, 1963\*

	Floor Space (Thousands of Square Feet)
Manufacturing Activity	46,479
Lumber	181
Furniture	850
Stone, clay & glass	863
Primary metals	1,426
Fabricated metals	8,651
Machinery, except electrical	3,157
Electrical machinery	2,884
Transportation equipment	524
Professional scientific equipment	773
Miscellaneous durables	2,676
Food	2,364
Tobacco	14
Textiles	170
Apparel	1,240
Paper	1,435
Printing & publishing	1,427
Chemicals	12,513
Petroleum	586
Rubber	4,597
Leather	148
Warehousing, Trucking & Wholesaling	12,949
Warehousing	5,762
Trucking	967
Food wholesaling	2,157
Other wholesaling	4,063
<b>Total</b>	<b>59,428</b>

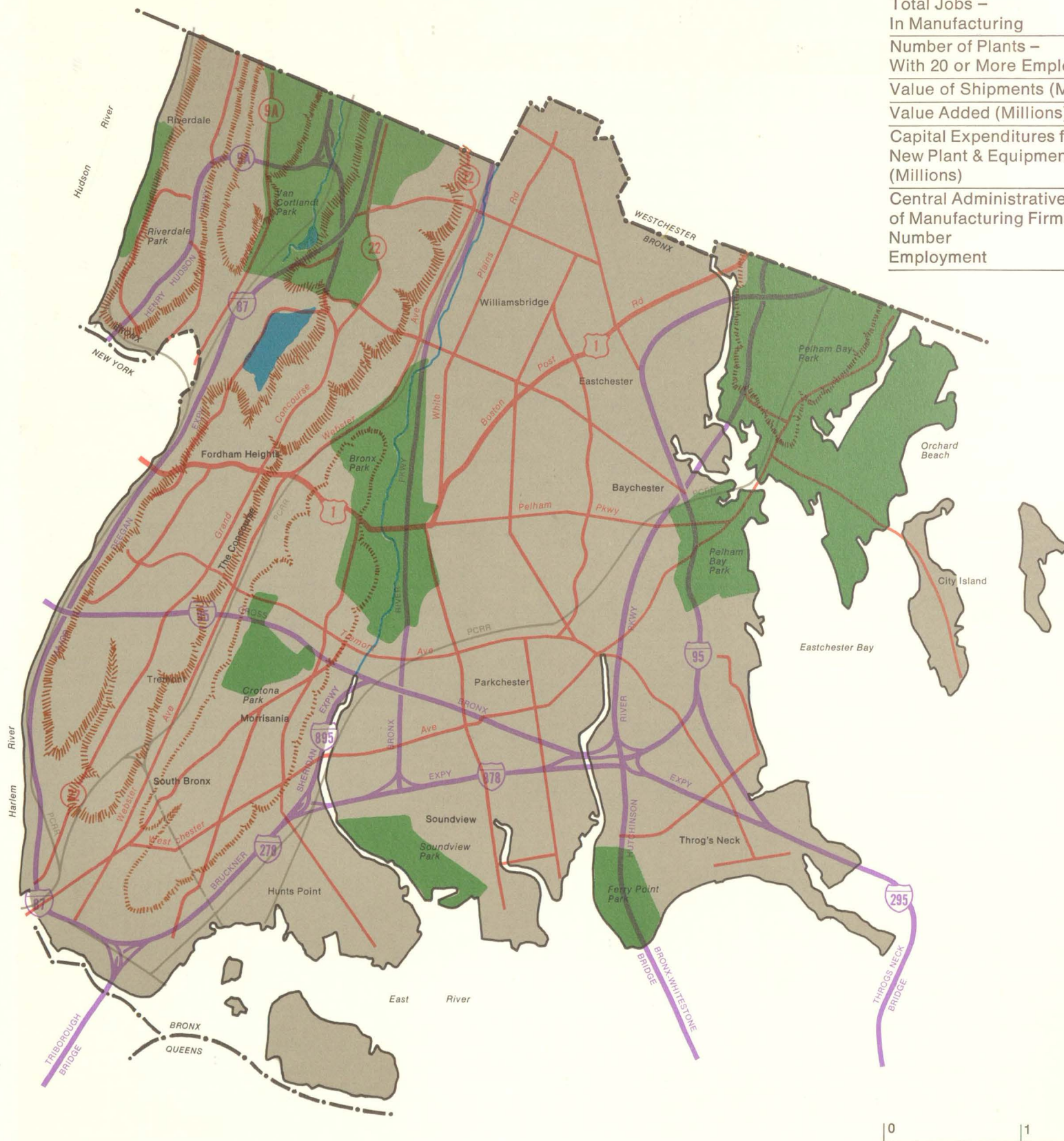
Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, almost 6 million square feet of industrial and warehouse floor space has been put in place in Union County.

Union County

Union County Industrial Parks Municipality—Name Developer	Acreage			Improvements				Transport Orientation*					Other Data	
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			Port Facility
											Commercial	General		
Cranford—Cranford Industrial Park Brown and Brown 160 Elmora Avenue Elizabeth, New Jersey	110	4	15	X	X	X	X	X	X		X	X	X	Build-to-Suit, Sell, Lease
Cranford—Cranford Research Center Brown and Brown 160 Elmora Avenue Elizabeth, New Jersey	70	36	4	X	X	X	X	X	X		X	X	X	Lease, Sell
Elizabeth—Center Port Industrial Park Benjamin Okin & Michael Palin 107 Trumbull Street Elizabeth, New Jersey	35	5	11	X	X	X	X	X	X	X	X	X	X	Package Plan, Long- Term Lease
Elizabeth—Elizabeth Central District C.R.R. of New Jersey 1100 Raymond Boulevard Newark, New Jersey	1,000	450	65	X	X	X	X	X	X	X	X	X	X	Sell
Linden—Edward A. Cantor Industrial Park Edward A. Cantor Affiliated Interests 1203 W. St. George Avenue Linden, New Jersey	70	0	37	X	X	X	X	X	X		X	X	X	Lease Only
Linden—Linden Industrial Park Edward A. Cantor Affiliated Interests 1203 W. St. George Avenue Linden, New Jersey	27	0	60	X	X	X	X	X	X	X	X	X	X	Lease Only
New Providence—Murray Hill Industrial Park Brown and Brown 160 Elmora Avenue Elizabeth, New Jersey	30	5	5	X	X	X	X		X		X	X	X	Lease-Back, Package Plans, Land Sale
Plainfield—Plainfield Industrial Center Newark Paraffine Paper Company 70 Blanchard Street Newark, New Jersey	25	3	21	X	X	X	X	X	X	X	X	X	X	Sell, Lease, Build- to-Suit
Springfield—C. T. Industries Industrial Park Brown and Brown 160 Elmora Avenue Elizabeth, New Jersey	120	1½	48	X	X	X	X	X	X		X	X	X	Lease-Back, Package Plans, Land Sales
Springfield—Union County Industrial Park Frank Cardinal, Inc. 266 Milltown Road Springfield, New Jersey	65	5	14	X	X	X	X		X		X	X	X	Build, Lease
Union—Gelb Industrial Center Brown and Brown 160 Elmora Avenue Elizabeth, New Jersey	40	3½	7	X	X	X	X	X	X	X	X	X	X	Lease-Back, Package Plans, Land Sales

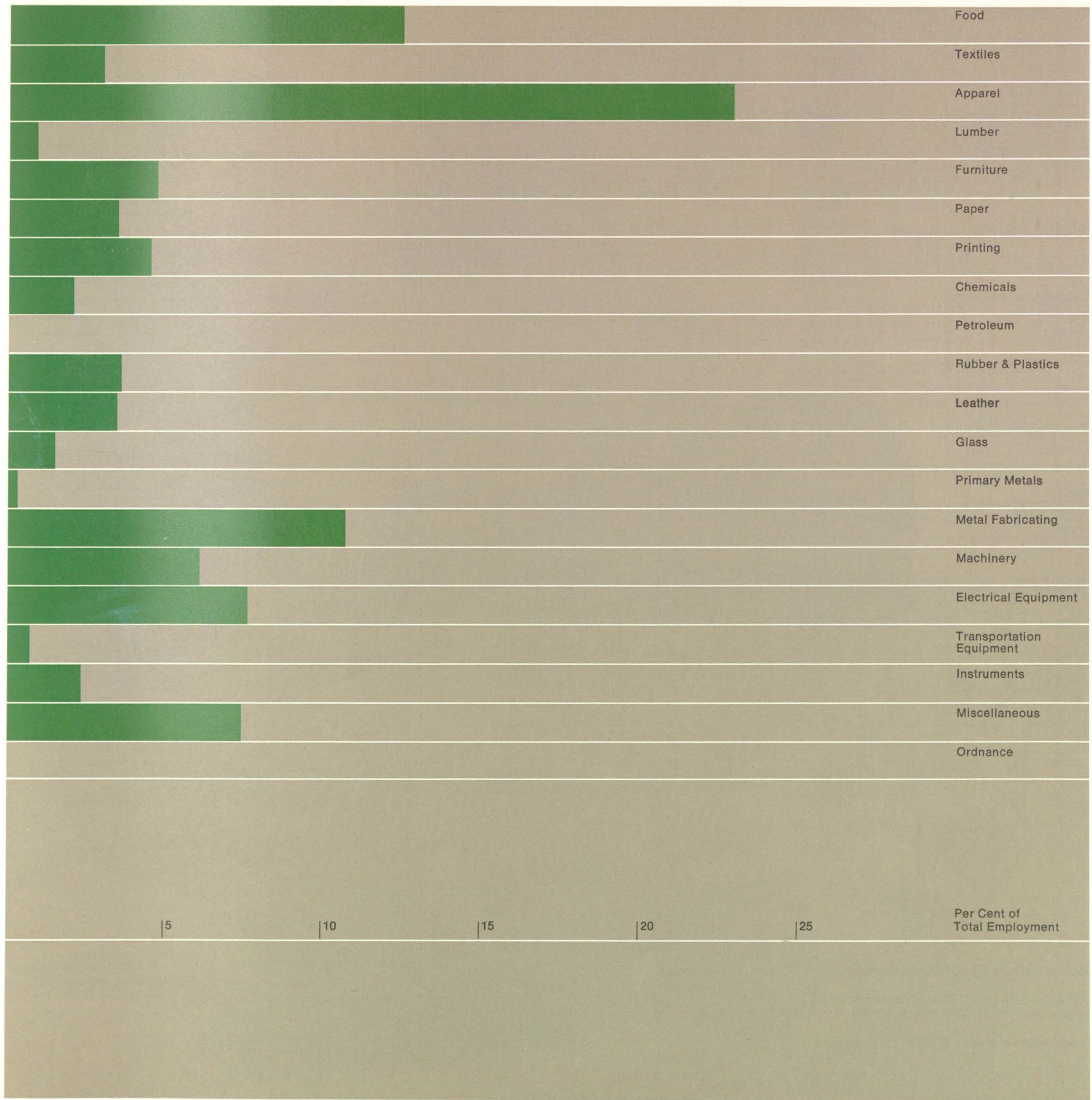
\*Determined by means of criteria listed on page 124



Area in Square Miles	43
Population	1,472,000
Total Jobs -	295,500
In Manufacturing	52,700
Number of Plants -	1,748
With 20 or More Employees	661
Value of Shipments (Millions) \$	1,094.
Value Added (Millions)	\$ 570.
Capital Expenditures for New Plant & Equipment (Millions)	\$ 16.
Central Administrative Units of Manufacturing Firms:	
Number	3
Employment	200

0 | 1 | Miles

Graph 36  
Industrial Profile of the Bronx



Per Cent of  
Total Employment

Total Industrial Land				
Permitted Uses	Vacant & Zoned Industrial	Vacant, Not Zoned But Suitable	Redevelopment Land	Total
Medium/ Heavy Industrial (Acres)	224.0	—	—	224.0
Light Industry (Acres)	358.4	35.0	34.2	427.6
Research & Office (Acres)	25.6	—	5.2	30.8
<b>Total (Acres)</b>	<b>608.0</b>	<b>35.0</b>	<b>39.4</b>	<b>682.4</b>

## Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	Total
Vacant & Zoned Industrial					
No. of Tracts	1	6	9	3	19
Acres	9.6	105.6	268.8	224.0	608.0

## Vacant, Not Zoned But Suitable

No. of Tracts	—	—	1	—	1
Acres	—	—	35.0	—	35.0

## Redevelopment Land

No. of Tracts	5	1	—	—	6
Acres	20.6	18.8	—	—	39.4

## Total

No. of Tracts	6	7	10	3	26
Acres	30.2	124.4	303.8	224.0	682.4

## Transportation Orientation\*

Acres	Free-way	Major High-way	Rail	Sub-way	Commercial Air-port	General Air-port	Port Facility	Waterfront** 35' or More	9'-18'
12.8	X	X	X	X	X	X	X		X
19.8	X	X	X	X	X	X	X		
86.4	X	X	X		X	X	X		X
156.8	X	X		X	X	X	X		X
128.4	X	X		X	X	X	X		
108.8	X	X			X	X	X	X	
108.8	X	X			X	X	X		X
25.6	X	X			X	X	X		
<b>Total</b>									
<b>647.4*</b>									

Source: New York City Planning Commission.

\*Does not include 35.0 acres of land which is vacant, not zoned industrial, but suitable.

\*\*Water Depth at Mean Low Tide

## Floor Space in Existing Structures, 1963\*

Type of Structure	Floor Space (Thousands of Square Feet)
Factory Buildings	7,611
Heavy manufacturing	1,511
Special construction	2,591
One-story, fireproof	1,231
Semi-fireproof	2,111
Miscellaneous	141
Loft Buildings	1,791
Over eight stories	—
Fireproof	1,351
Semi-fireproof	41
With retail stores	261
Miscellaneous	141
Warehouses	5,901
Fireproof	5,091
— one-story	1,111
— two-or-more stories	3,971
Semi-fireproof	811
Miscellaneous	—
<b>Total</b>	<b>15,301</b>

Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

## Bronx County Industrial Parks

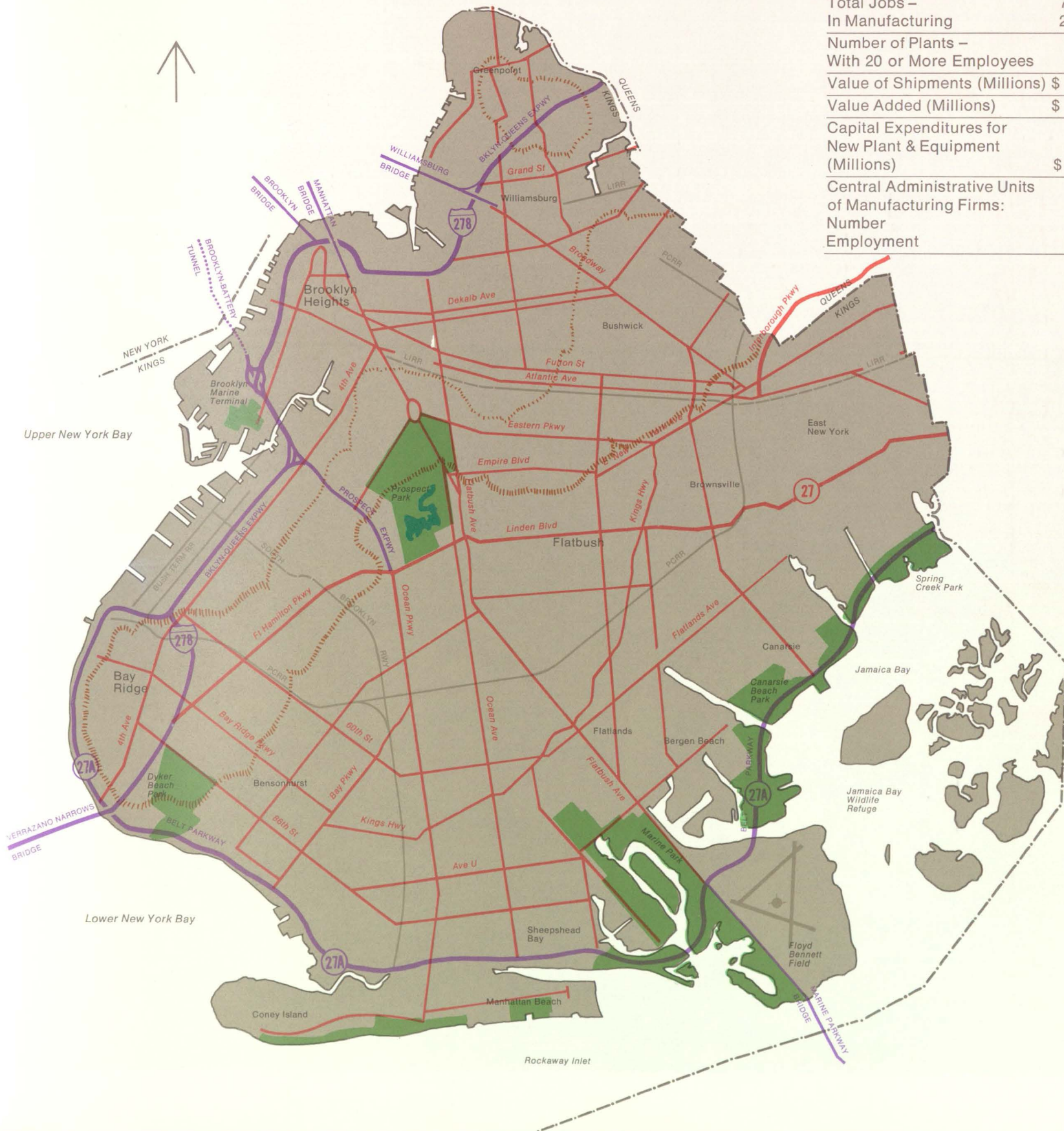
NOTE: The New York City Economic Development Administration is offering space in the James J. Lyons Urban Renewal Area (50 acres, of which 10 acres are presently available); the Zerega Avenue Urban Renewal Project (50 acres of which 12 acres are available immediately); and the Bruckner Boulevard-East 149th Street Urban Renewal Area (13.8 acres). For details, contact the Economic Development Administration.

\*It is our estimate that since 1963, over 2.1 million square feet of industrial and warehouse floor space has been put in place in the Bronx.

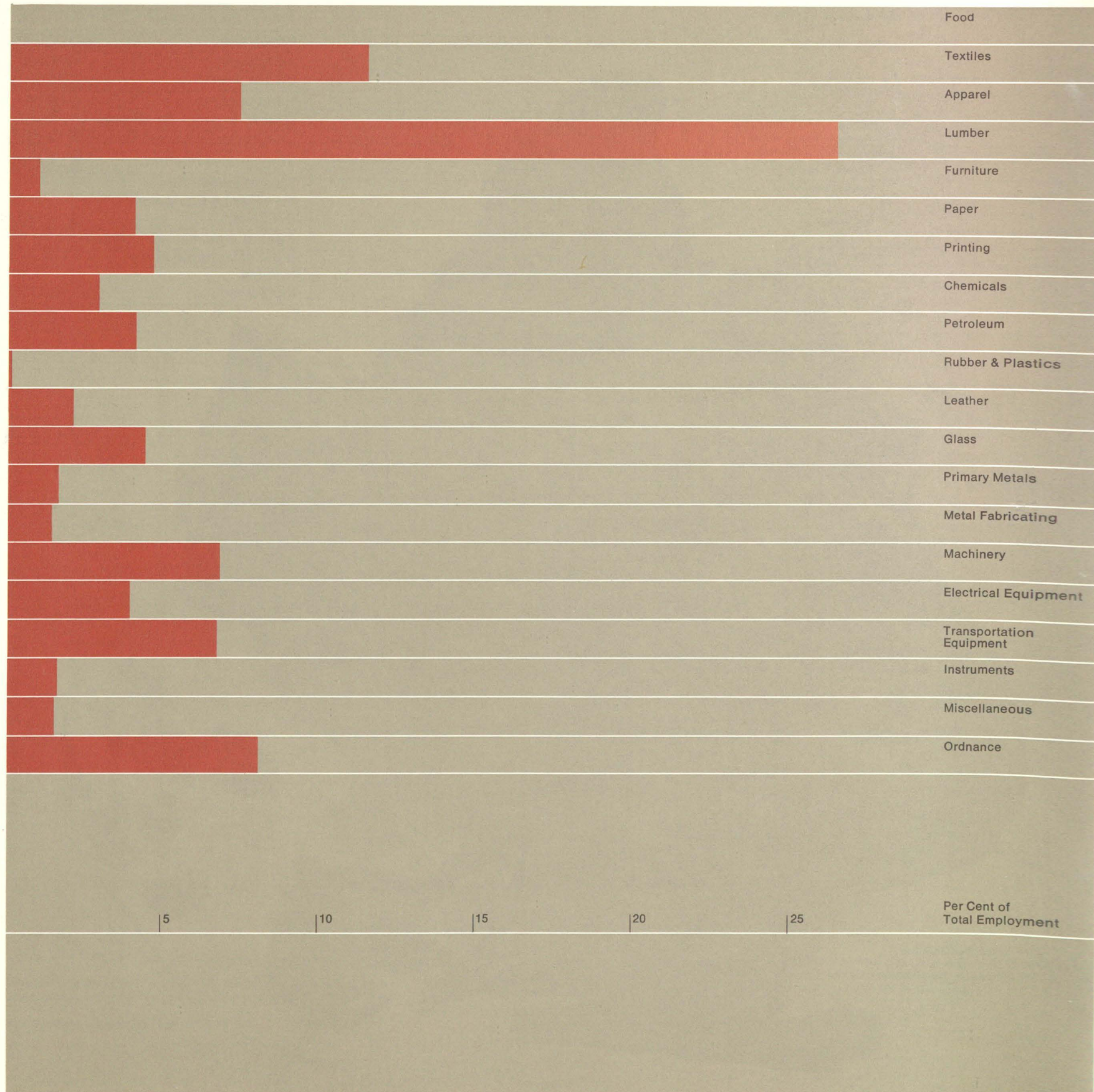
0 1 2 Miles



Area in Square Miles	76
Population	2,602,000
Total Jobs –	728,300
In Manufacturing	220,300
Number of Plants –	6,384
With 20 or More Employees	2,490
Value of Shipments (Millions) \$	4,297.2
Value Added (Millions)	\$ 2,190.7
Capital Expenditures for New Plant & Equipment (Millions)	\$ 65.7
Central Administrative Units of Manufacturing Firms:	
Number	128
Employment	18,700



Graph 37  
Industrial Profile of Brooklyn



Total Industrial Land				
Permitted Uses	Vacant & Zoned Industrial	Vacant, Not Zoned But Suitable	Redevelopment Land	Total
Medium/Heavy Industrial (Acres)	182.4	—	—	182.4
Light Industry (Acres)	345.6	225.0	269.4	840.0
Research & Office (Acres)	32.0	—	64.4	96.4
<b>Total (Acres)</b>	<b>560.0</b>	<b>225.0</b>	<b>333.8</b>	<b>1,118.8</b>

## Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
Vacant & Zoned Industrial								
No. of Tracts	11	16	4	—	1	—	—	32
Acres	80.0	249.6	108.8	—	121.6	—	—	560.0

## Vacant, Not Zoned But Suitable

No. of Tracts	—	—	—	—	—	1	—	1
Acres	—	—	—	—	—	225.0	—	225.0

## Redevelopment Land

No. of Tracts	6	3	2	1	1	—	—	13
Acres	38.4	40.8	62.4	63.2	129.0	—	—	333.8

## Total

No. of Tracts	17	19	6	1	2	1	—	46
Acres	118.4	290.4	171.2	63.2	250.6	225.0	—	1,118.8

## Transportation Orientation\*

Acres	Free-way	Major High-way	Rail	Sub-way	Commercial Air-port	General Air-port	Port Facility	Waterfront**		
								35' or More	19'-34'	9'-18'
19.2	X	X	X	X	X	X	X	X		
258.0	X	X	X	X	X	X	X			
177.0	X	X		X	X	X	X	X		
222.0	X	X		X	X	X	X			
70.4	X	X			X	X	X	X		
19.2	X	X			X	X	X		X	
38.4	X	X			X	X	X			
57.6	X	X			X	X	X			X
32.0	X	X			X	X	X			
<b>Total</b>										
893.8*										

Source: New York City Planning Commission.

\*Does not include 225.0 acres of land which is vacant, not zoned industrial, but suitable.

\*\*Water Depth at Mean Low Tide

## Floor Space in Existing Structures, 1963\*

Type of Structure	Floor Space (Thousands of Square Feet)
<b>Factory Buildings</b>	<b>63,327</b>
Heavy manufacturing	5,979
Special construction	2,563
One-story, fireproof	5,255
Semi-fireproof	18,238
Miscellaneous	31,292
<b>Loft Buildings</b>	<b>10,880</b>
Over eight stories	518
Fireproof	3,543
Semi-fireproof	660
With retail stores	1,037
Miscellaneous	5,122
<b>Warehouses</b>	<b>9,674</b>
Fireproof	5,145
— one-story	1,556
— two-or-more stories	3,589
Semi-fireproof	2,764
Miscellaneous	1,765
<b>Total</b>	<b>83,881</b>

Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, 4.1 million square feet of industrial and warehouse floor space has been put in place in Brooklyn.

Brooklyn

Kings County Industrial Parks Location—Name Developer	Acreage		Number of Occupants	Improvements				Transport Orientation*					Other Data		
	Total	Unoccupied		Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			Port Facility	
Brooklyn—Brooklyn Navy Yard Commerce Labor & Industry Corporation Brooklyn Navy Yard Brooklyn, New York	275	35	21	X	X	X	X	X				X	X	X	Long-Term Lease
Canarsie—Flatlands Urban Industrial Park Rentar Development Corporation 89-89 Union Turnpike Glendale, New York	96	25	9	X	X	X	X		X	X		X	X	X	Rental Only
Greenpoint Industrial Park—Projected Industrial Renewal Area; Contact Economic Development Administration								X				X	X		

NOTE: The New York City Economic Development Administration has slated industrial parks, not separately listed because each amounts to less than 25 acres; Williamsburg (11 acres), East New York (7.4 acres) and Coney Island (2 acres).

\*Determined by means of criteria listed on page 124

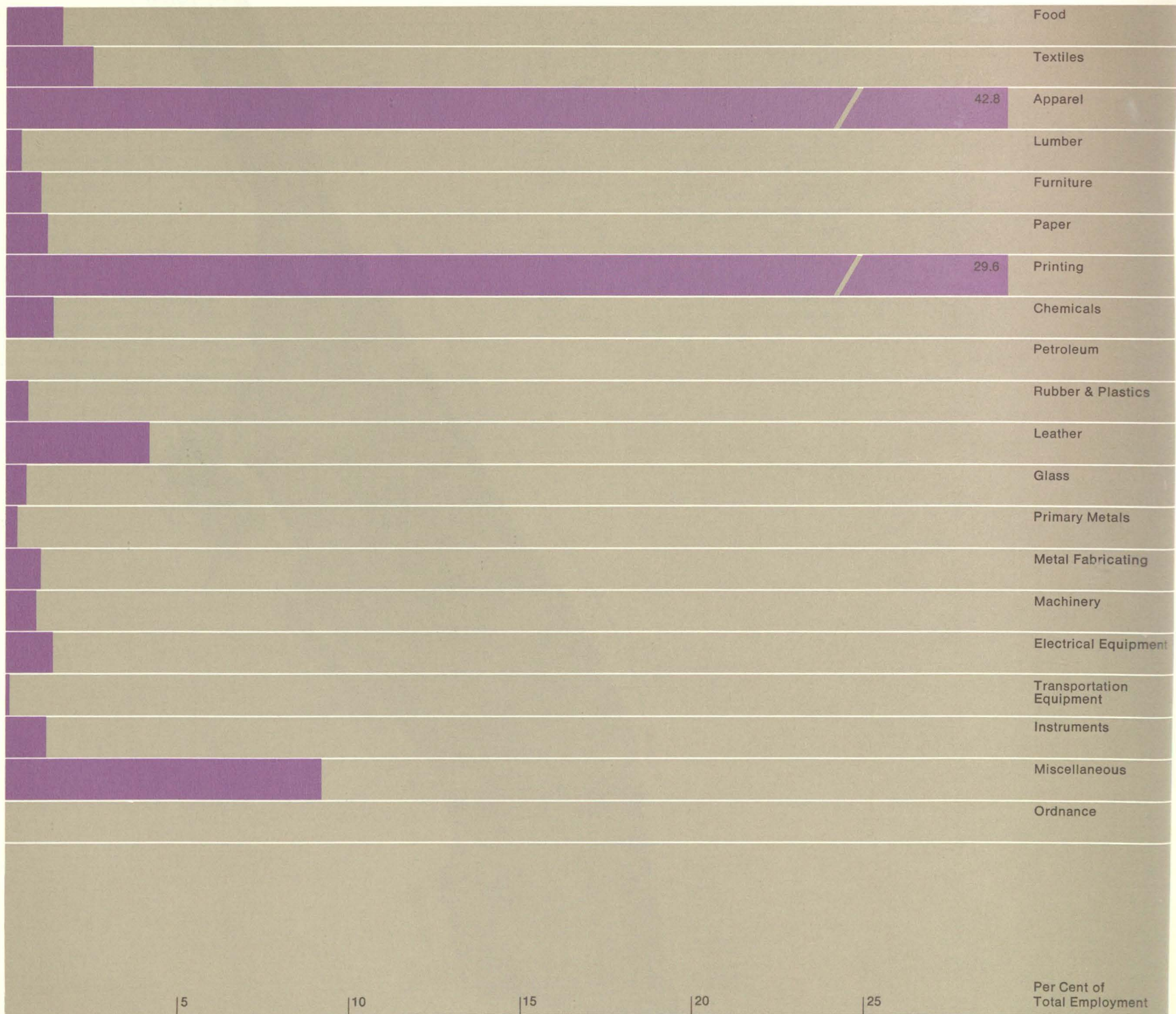
Manhattan (New York County)

0 1 Miles

Area in Square Miles	22
Population	1,539,000
Total Jobs -	2,559,400
In Manufacturing	396,600
Number of Plants -	17,841
With 20 or More Employees	5,216
Value of Shipments (Millions) \$	11,992.2
Value Added (Millions)	\$ 5,666.8
Capital Expenditures for New Plant & Equipment (Millions)	\$ 136.2
Central Administrative Units of Manufacturing Firms:	
Number	555
Employment	85,700



Graph 38  
Industrial Profile of Manhattan



Total Industrial Land			
Permitted Uses	Vacant & Zoned Industrial	Redevelopment Land	Total
Medium/ Heavy Industrial (Acres)	57.6	—	57.6
Light Industry (Acres)	12.8	44.1	56.9
Research & Office (Acres)	57.6	—	57.6
<b>Total (Acres)</b>	<b>128.0</b>	<b>44.1</b>	<b>172.1</b>

## Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
<b>Vacant &amp; Zoned Industrial</b>								
No. of Tracts	—	1	2	1	—	—	—	4
Acres	—	12.8	57.6	57.6	—	—	—	128.0
<b>Redevelopment Land</b>								
No. of Tracts	—	—	1	—	—	—	—	1
Acres	—	—	44.1	—	—	—	—	44.1
<b>Total</b>								
No. of Tracts	—	1	3	1	—	—	—	5
Acres	—	12.8	101.7	57.6	—	—	—	172.1

## Transportation Orientation

Total Acres	Freeway	Major Highway	Subway	Commercial Airport	General Airport	Port Facility	Waterfront* 35' or More	9'-18'
32.0	X	X	X	X	X	X	X	
44.1	X	X	X	X	X	X		X
38.4	X	X	X	X	X	X		
57.6	X	X		X	X	X	X	
<b>Total</b> 172.1								

Source: New York City Planning Commission.

\*Water Depth at Mean Low Tide

## Floor Space in Existing Structures, 1963\*

Type of Structure	Floor Space (Thousands of Square Feet)
<b>Factory Buildings</b>	<b>30,562</b>
Heavy Manufacturing	5,184
Special construction	9,436
One-story, fireproof	146
Semi-fireproof	3,600
Miscellaneous	12,196
<b>Loft Buildings</b>	<b>167,104</b>
Over eight stories	69,455
Fireproof	26,036
Semi-fireproof	7,465
With retail stores	36,379
Miscellaneous	27,769
<b>Warehouses</b>	<b>12,593</b>
Fireproof	9,517
— one-story	314
— two-or-more stories	9,203
Semi-fireproof	2,120
Miscellaneous	956
<b>Total</b>	<b>210,259</b>

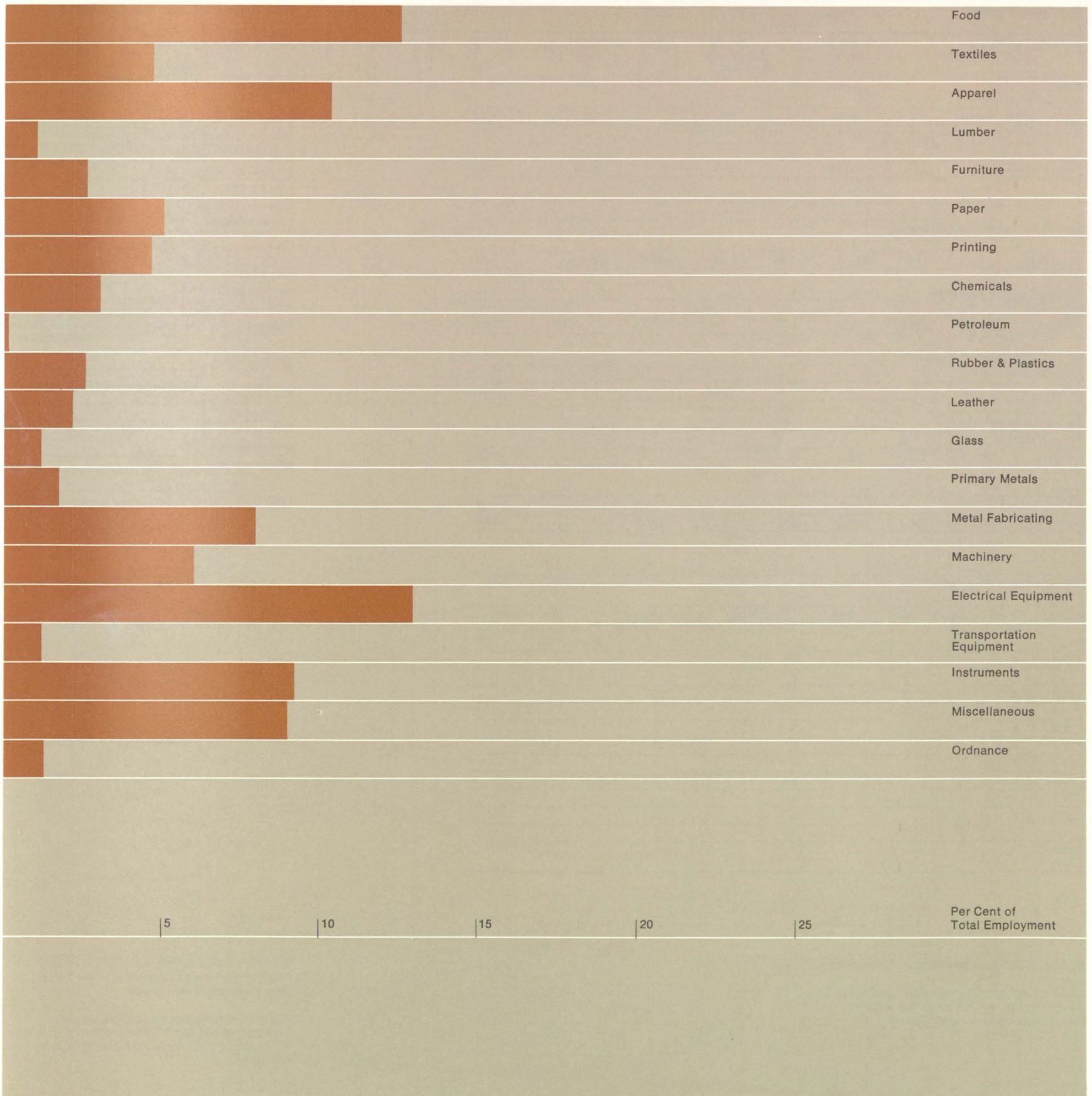
Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, over 400,000 square feet of industrial and warehouse floor space has been put in place in Manhattan.



Area in Square Miles	113
Population	1,987,000
Total Jobs -	588,300
In Manufacturing	132,300
Number of Plants -	2,972
With 20 or More Employees	1,148
Value of Shipments (Millions) \$	3,268.0
Value Added (Millions)	\$ 1,680.7
Capital Expenditures for New Plant & Equipment (Millions)	\$ 60.4
Central Administrative Units of Manufacturing Firms:	
Number	25
Employment	1,200

Graph 39  
Industrial Profile of Queens



## Queens County

## Total Industrial Land

Permitted Uses	Vacant & Zoned Industrial	Vacant, Not Zoned But Suitable	Redevelopment Land	Total
Medium/ Heavy Industrial (Acres)	145.3	—	46.0	191.3
Light Industry (Acres)	409.6	250.0	112.4	772.0
Research & Office (Acres)	16.0	—	9.2	25.2
<b>Total (Acres)</b>	<b>570.9</b>	<b>250.0</b>	<b>167.6</b>	<b>988.5</b>

## Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
<b>Vacant &amp; Zoned Industrial</b>								
No. of Tracts	14	13	1	—	—	1	—	29
Acres	106.9	201.6	25.6	—	—	236.8	—	570.9
<b>Vacant, Not Zoned But Suitable</b>								
No. of Tracts	—	—	—	—	2	—	—	2
Acres	—	—	—	—	250.0	—	—	250.0
<b>Redevelopment Land</b>								
No. of Tracts	7	3	1	1	—	—	—	12
Acres	28.8	54.8	28.0	56.0	—	—	—	167.6
<b>Total</b>								
No. of Tracts	21	16	2	1	2	1	—	43
Acres	135.7	256.4	53.6	56.0	250.0	236.8	—	988.5

## Transportation Orientation\*

Acres	Free-way	Major High-way	Rail	Sub-way	Commercial Airport	General Airport	Port Facility	Waterfront**		
								35' or More	19'-34'	9'-18'
100.4	X	X	X	X	X	X	X			
25.6	X	X	X		X	X		X		
19.2	X	X	X		X	X	X			
9.6	X	X	X		X		X			
34.0	X	X		X	X	X	X			
19.2	X	X		X	X		X		X	
22.4	X	X		X	X		X			
25.6	X	X			X	X	X	X		
19.2	X	X			X	X	X		X	
99.3	X	X			X	X	X			X
364.0	X	X			X	X	X			
<b>Total</b>										
738.5*										

Source: New York City Planning Commission.

\*Does not include 250.0 acres of land which is vacant, not zoned industrial, but suitable.

\*\*Water Depth at Mean Low Tide

## Floor Space in Existing Structures, 1963\*

Type of Structure	Floor Space (Thousands of Square Feet)
<b>Factory Buildings</b>	<b>44,936</b>
Heavy manufacturing	15,131
Special construction	1,935
One-story, fireproof	4,285
Semi-fireproof	10,005
Miscellaneous	13,580
<b>Loft Buildings</b>	<b>1,196</b>
Over eight stories	—
Fireproof	1,030
Semi-fireproof	53
With retail stores	59
Miscellaneous	54
<b>Warehouses</b>	<b>10,845</b>
Fireproof	9,347
— one-story	5,033
— two-or-more stories	4,314
Semi-fireproof	1,346
Miscellaneous	152
<b>Total</b>	<b>56,977</b>

Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, almost 5 million square feet of industrial and warehouse floor space has been put in place in Queens County.

Queens County Industrial Parks	Acreage		Improvements				Transport Orientation*					Other data		
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			
Location—Name Developer											Commercial	General	Port Facility	
Queens—College Point Industrial Park New York City Public Development Corporation 217 Broadway New York, New York	250	250	0			X	X	X			X	X	X	Sell or Lease

NOTE: The New York City Economic Development Administration is offering space in the projected 11-acre Kennedy Air Services Industrial Park—to be located in the vicinity of JFKIA. The site has not been listed separately because its size is below the minimum set by the National Industrial Zoning Council for industrial parks. This also holds true with Springfield Boulevard Industrial Park which is located at the intersection of New Rockaway Boulevard and Springfield Boulevard Extension.

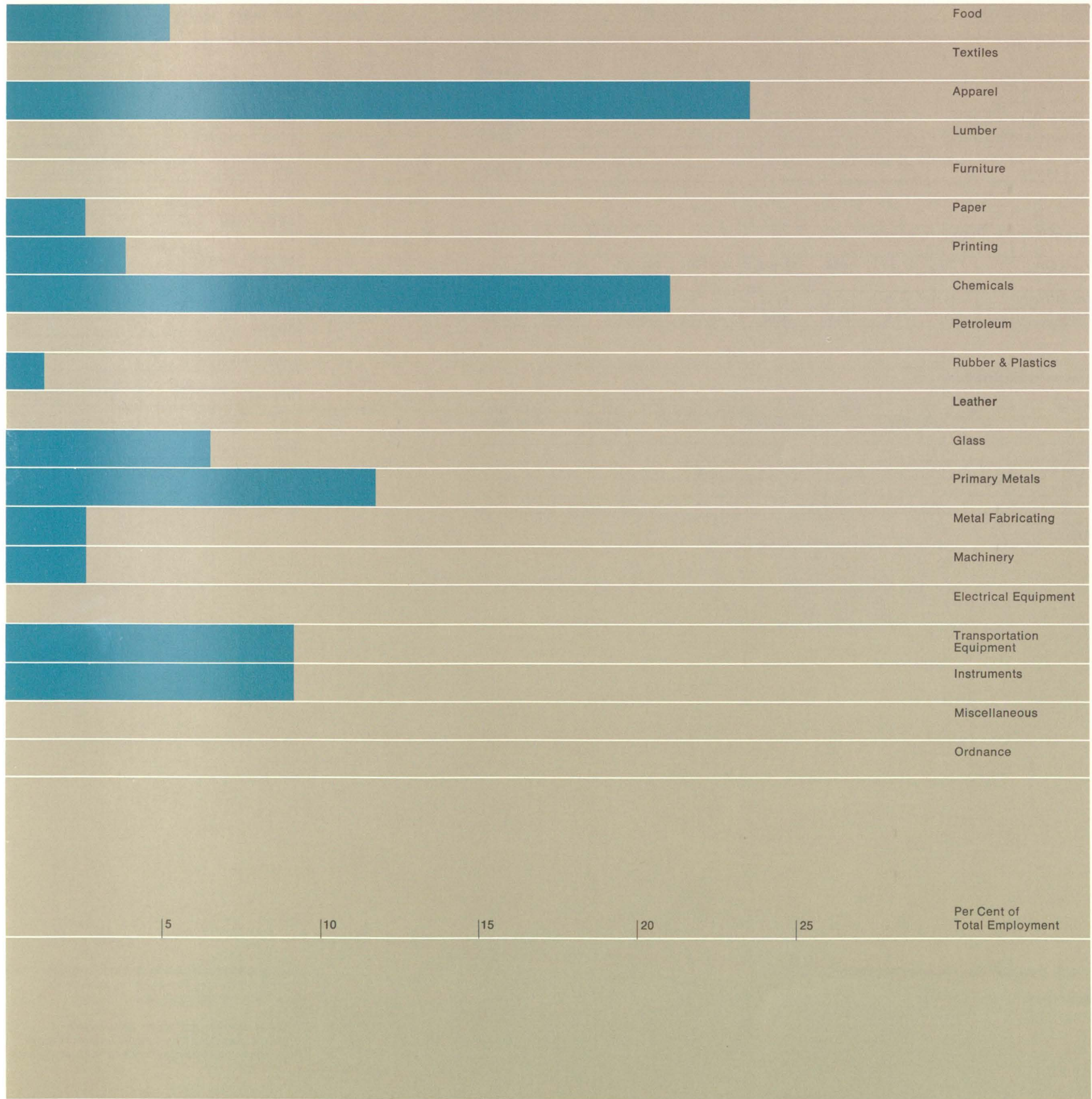
\*Determined by means of criteria listed on page 124

Area in Square Miles	57
Population	295,000
Total Jobs –	64,900
In Manufacturing	7,700
Number of Plants –	176
With 20 or More Employees	70
Value of Shipments (Millions) \$	338.6
Value Added (Millions) \$	136.7
Capital Expenditures for New Plant & Equipment (Millions)	\$ 6.9
Central Administrative Units of Manufacturing Firms:	
Number	4
Employment	300



0 | 1 | 2 | Miles

Graph 40  
Industrial Profile of Staten Island



Staten Island

Total Industrial Land

Permitted Uses	Vacant & Zoned Industrial
Medium/ Heavy Industrial (Acres)	2,896.6
Light Industry (Acres)	1,906.6
Research & Office (Acres)	204.8
<b>Total (Acres)</b>	<b>5,008.0</b>

Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
No. of Tracts	1	5	6	2	3	1	5	23
Acres	6.4	76.8	176.0	163.2	371.2	326.4	3,888.0	5,008.0

Transportation Orientation

Acres	Freeway	Major Highway	Rail	Commercial Airport	General Airport	Port Facility	Waterfront* 35' or More
3,894.4	X	X	X	X	X	X	X
51.2	X	X	X	X	X	X	
774.4	X	X		X	X	X	X
288.0	X	X		X	X	X	
<b>Total</b>							
5,008.0							

Source: New York City Planning Commission.

\*Water Depth at Mean Low Tide

Floor Space in Existing Structures, 1963\*

Type of Structure	Floor Space (Thousands of Square Feet)
<b>Factory Buildings</b>	<b>5,618</b>
Heavy manufacturing	982
Special construction	1,263
One-story, fireproof	186
Semi-fireproof	199
Miscellaneous	2,988
<b>Loft Buildings</b>	<b>1,463</b>
Over eight stories	—
Fireproof	522
Semi-fireproof	—
With retail stores	7
Miscellaneous	934
<b>Warehouses</b>	<b>2,760</b>
Fireproof	2,548
— one-story	154
— two-or-more stories	2,394
Semi-fireproof	59
Miscellaneous	153
<b>Total</b>	<b>9,841</b>

Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, a quarter-million square feet of industrial and warehouse floor space has been put in place in Staten Island.

Staten Island Industrial Parks	Acreage		Improvements				Transport Orientation*					Other data	
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport		
Municipality—Name Developer											Commercial	General	Port Facility
Staten Island Industrial Park Contact New York City Economic Development Administration	750	750	0	X	X	X	X	X		X	X	X	X

\*Determined by means of criteria listed on page 124

Area in Square Miles	330
Population	1,429,000
Total Jobs -	547,400
In Manufacturing	116,000
Number of Plants -	2,271
With 20 or More Employees	672
Value of Shipments (Millions) \$	2,842.0
Value Added (Millions) \$	1,639.8
Capital Expenditures for New Plant & Equipment (Millions)	\$ 84.3
Central Administrative Units of Manufacturing Firms:	
Number	24
Employment	4,000

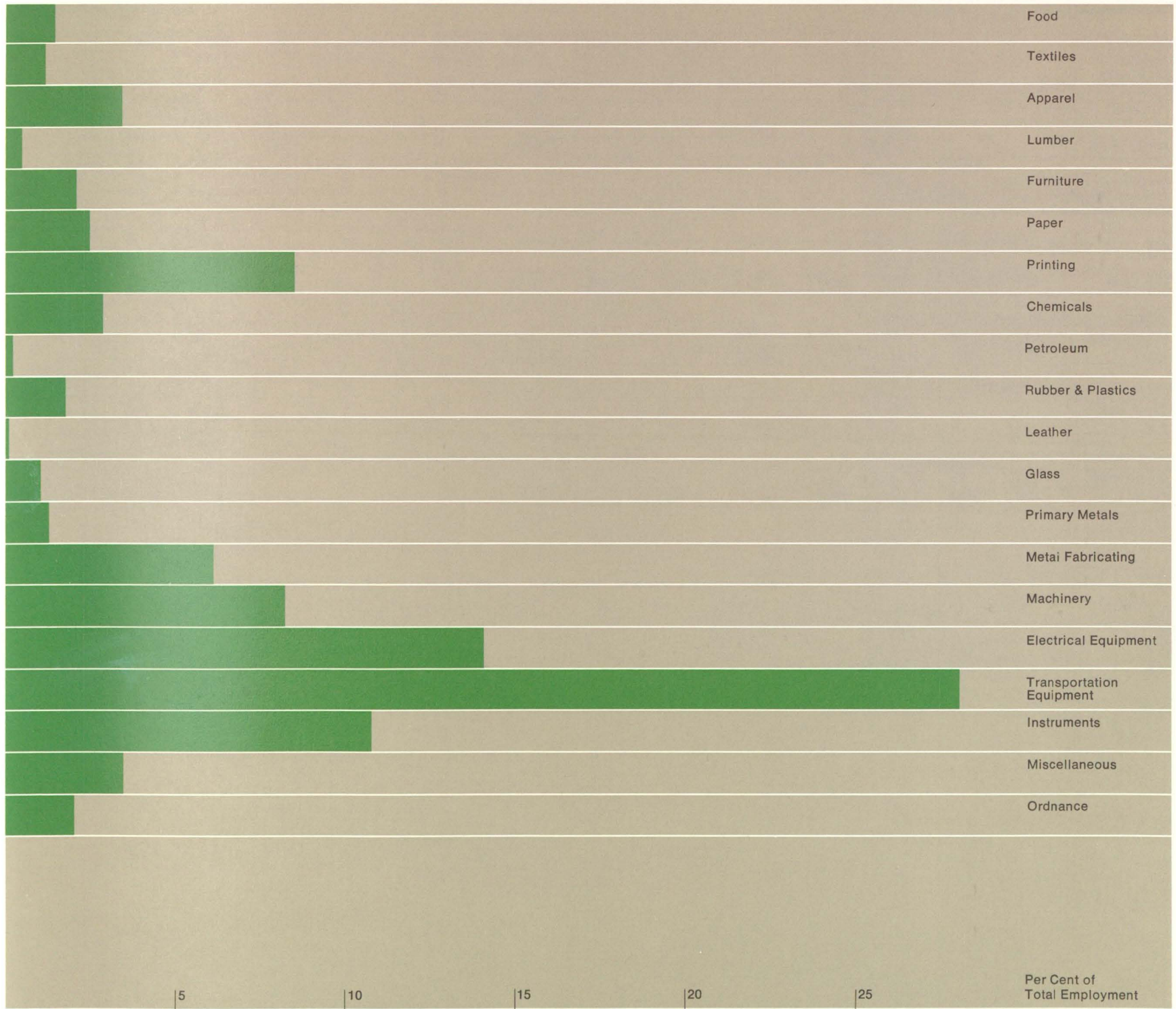


Cities and Towns  
with 1970 Approximate Populations

Under 10,000	●	Over 100,000	City
10,000-25,000	●		
25,000-100,000	●	County Seat	⊙

0 1 2 Miles

Graph 41  
Industrial Profile of Nassau



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 Total Industrial Land
 

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Permitted Uses	Vacant & Zoned Industrial	Vacant, Not Zoned But Suitable	Total
General Industrial (Acres)	1,232.3	75.0	1,307.3
Commercial* (Acres)	330.0	—	330.0
<b>Total (Acres)</b>	<b>1,562.3</b>	<b>75.0</b>	<b>1,637.3</b>

\*Acres zoned commercial are suitable for research laboratories and offices, but also permit retail businesses and other.

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 Size of Industrial Tracts in Acres
 

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Tract Size	0-1	2-10	11-25	26-50	51-100	101-200	201-Plus	Total
<b>Vacant &amp; Zoned Industrial</b>								
No. of Tracts	113	76	8	7	5	2	—	211
Acres	47.6	238.4	112.2	254.3	346.8	233.0	—	1,232.3
<b>Vacant, Not Zoned but Suitable</b>								
No. of Tracts	—	—	—	—	1	—	—	1
Acres	—	—	—	—	75.0	—	—	75.0
<b>Total Number</b>								
No. of Tracts	113	76	8	7	6	2	—	212
Acres	47.6	238.4	112.2	254.3	421.8	233.0	—	1,307.3*

\*Does not include 330.0 acres of land which is vacant, commercially zoned.

## Transportation Orientation

Acres	Freeway	Major Highway	Rail	Commercial Airport	General Airport	Port Facility	Waterfront** 35' or More	9'-18'
5.6	X	X	X	X	X			
75.0		X	X	X		X	X	
142.9	X	X	X	X				
312.4	X	X	X		X			
6.2	X	X		X	X			
11.4		X	X	X		X		
3.7		X	X	X				X
10.3		X		X		X	X	
118.8	X	X		X				
261.2	X	X			X			
2.4	X		X		X			
5.1	X			X				X
18.3		X	X	X				
4.6		X		X	X			
12.1		X		X		X		
13.3		X		X				X
12.2				X		X	X	
2.5	X			X				
5.2	X				X			
115.9		X		X				
16.4			X	X				
11.8				X		X		
17.4				X			X	
31.4		X						
91.2				X				
Total								
1,307.3*								

Source: Nassau County Planning Commission.

\*Does not include 330.0 acres of land which is vacant, commercially zoned.

\*\*Water Depth at Mean Low Tide.

## Floor Space in Existing Structures, 1963\*

	Floor Space (Thousands of Square Feet)
Manufacturing Activity	44,317
Lumber	887
Furniture	966
Stone, clay & glass	898
Primary metals	1,261
Fabricated metals	3,250
Machinery, except electrical	2,066
Electrical machinery	6,711
Transportation equipment	10,695
Professional scientific equipment	5,005
Miscellaneous durables	2,074
Food	695
Tobacco	—
Textiles	192
Apparel	543
Paper	1,304
Printing & publishing	3,741
Chemicals	1,561
Petroleum	449
Rubber	1,979
Leather	40
Warehousing, Trucking & Wholesaling	10,767
Warehousing	2,718
Trucking	366
Food wholesaling	1,424
Other wholesaling	6,259
Total	55,084

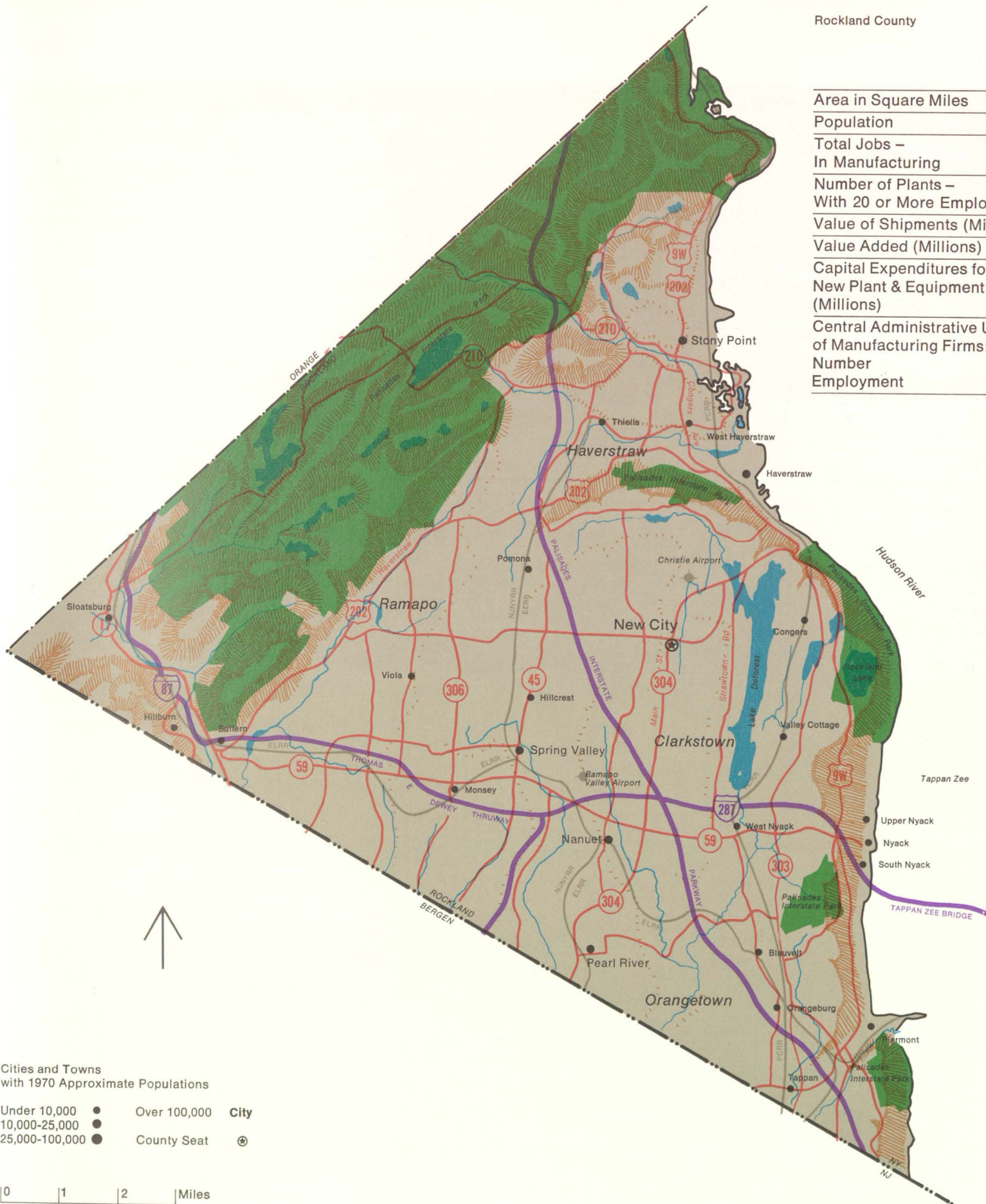
Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, 10.5 million square feet of industrial and warehouse floor space has been put in place in Nassau County.

Nassau County Industrial Parks Municipality—Name Developer	Acreage			Improvements				Transport Orientation*					Other Data	
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			Port Facility
											Commercial	General		
Freeport—Town of Hempstead Industrial Park Local Development Corporation Town Hall Hempstead, New York	80	0	18	X	X	X	X		X		X	X	X	Municipal Financing, Lease, Sell
Hempstead—Roosevelt Field Industrial Park Roosevelt Field, Inc. Garden City, New York	75	9	40	X	X	X	X		X	X	X	X	X	Sell, Rent
New Hyde Park—Lake Success Quadrangle We're Associates 3000 Marcus Avenue New Hyde Park, New York	52	4	60	X	X	X	X	X	X		X	X	X	Financing, Leasing Only
Old Bethpage—Twin County Industrial Park Racanelli Construction Company 175 Sweet Hollow Road Old Bethpage, New York	42	10	12	X		X	X	X	X			X	X	
Plainview—Mascioli Associates Industrial Park 467 Great Neck Road Great Neck, New York	80	0	45	X	X	X	X	X	X			X	X	30 Buildings, Sell, Lease, Build-to-Suit
Plainview—Plainview Industrial Park C. Mascioli Associates 467 Great Neck Road Great Neck, New York	80	10	2	X	X	X	X	X	X			X	X	Six Buildings, Sell, Lease
Roslyn—Hempstead Harbor Business Center S. Malman 80 Clove Drive Great Neck, New York	163	163	0	X	X	X	X		X	X	X	X	X	Lease, Build-to-Suit
Syosset—Americana Research Center Jerry Lazarus Associates 960 Broadway Hicksville, New York	28	4	3	X	X	X	X	X	X	X		X	X	Financing Available, Rent, Sell
Syosset—Syosset Industrial Park Michael Forte Jericho, New York	125	0	30	X	X	X	X	X	X	X		X	X	33 Buildings, Lease, Sell, Build-to-Suit
Syosset—Terminal Industrial Park Floral Management Company Jericho Turnpike New Hyde Park, New York	28	28	0		X	X	X	X	X	X		X	X	Sell, Lease
Westbury—Designed Industrials at Westbury J. Spiegel Associates 270 North Broadway Hicksville, New York	25	1	20	X	X	X	X	X	X		X	X	X	Lease Only
Woodbury—Gateway Executive Mall Mr. Gilbert Tilles 7600 Jericho Turnpike Woodbury, New York	70	70	0	X	X	X	X	X	X			X	X	Sell, Lease, Build- to-Suit
Woodbury—Nassau Crossways International Plaza Mr. Gilbert Tilles 7600 Jericho Turnpike Woodbury, New York	137	32	20	X	X	X	X	X	X			X	X	Sell, Lease, Build- to-Suit

\*Determined by means of criteria listed on page 124

Area in Square Miles	178
Population	230,000
Total Jobs –	63,700
In Manufacturing	14,000
Number of Plants –	196
With 20 or More Employees	84
Value of Shipments (Millions) \$	531.5
Value Added (Millions) \$	371.9
Capital Expenditures for New Plant & Equipment (Millions)	\$ 11.7
Central Administrative Units of Manufacturing Firms:	
Number	3
Employment	200

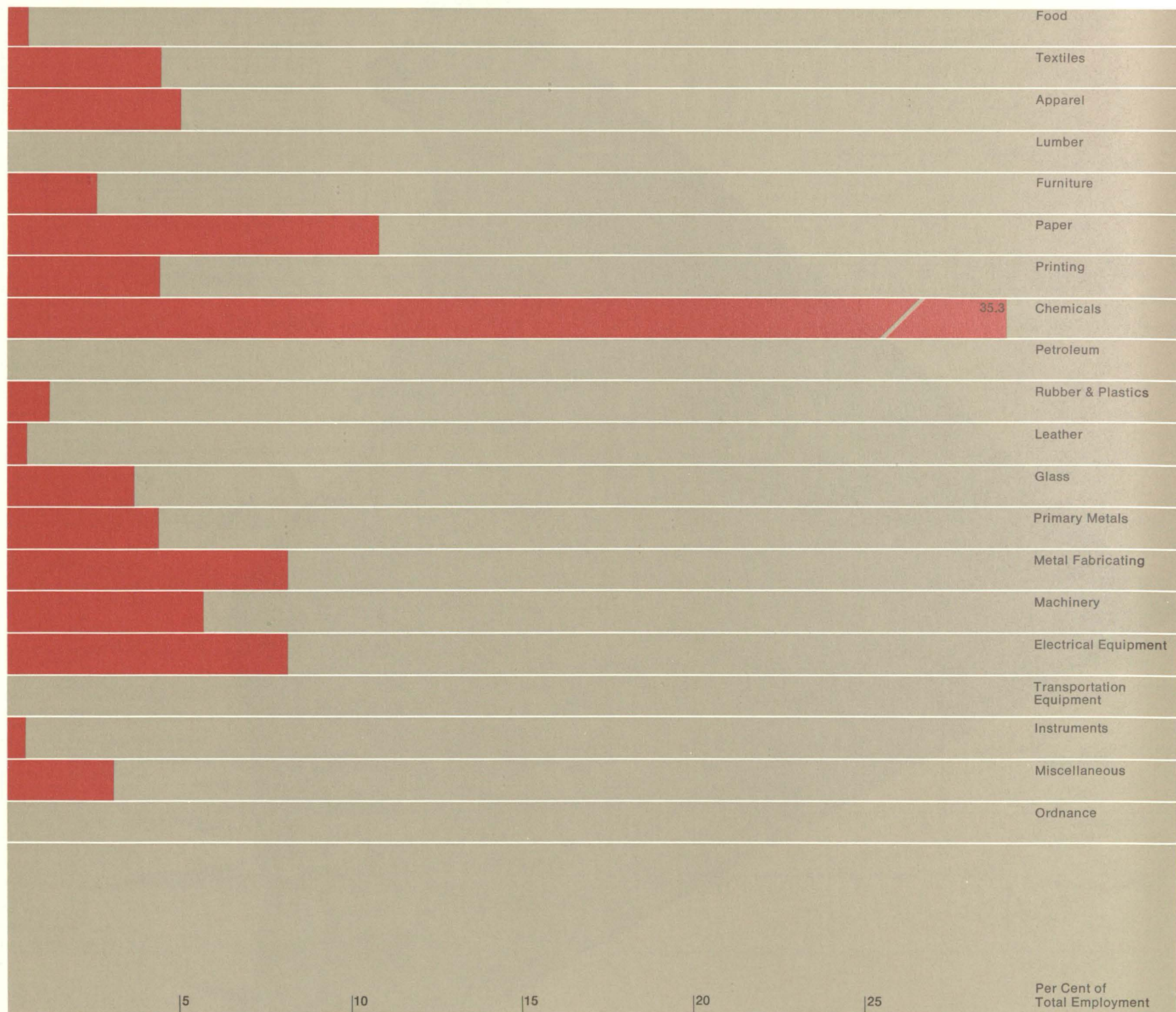


Cities and Towns with 1970 Approximate Populations

- Under 10,000 ●
- 10,000-25,000 ●
- 25,000-100,000 ●
- Over 100,000 ●
- City ●
- County Seat ⊕

0 | 1 | 2 Miles

Graph 42  
Industrial Profile of Rockland



Total Industrial Land	
Permitted Uses	Vacant & Zoned Industrial
Medium/ Heavy Industrial (Acres)	1,971
Light Industry (Acres)	2,703
Warehousing and Distribution (Acres)	761
Research & Office (Acres)	2,385
<b>Total (Acres)</b>	<b>7,820</b>

## Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
No. of Tracts	—	7	9	15	10	9	4	54
Acres	—	153	361	1,115	1,441	2,314	2,436	7,820

## Transportation Orientation

Acres	Freeway	Major Highway	Rail	General Airport	Waterfront* 35' or More
186	X	X	X	X	X
6,482	X	X	X	X	
251		X	X	X	X
901		X	X	X	
<b>Total</b>					
7,820					

Source: Rockland County Planning Board.

\*Water Depth at Mean Low Tide

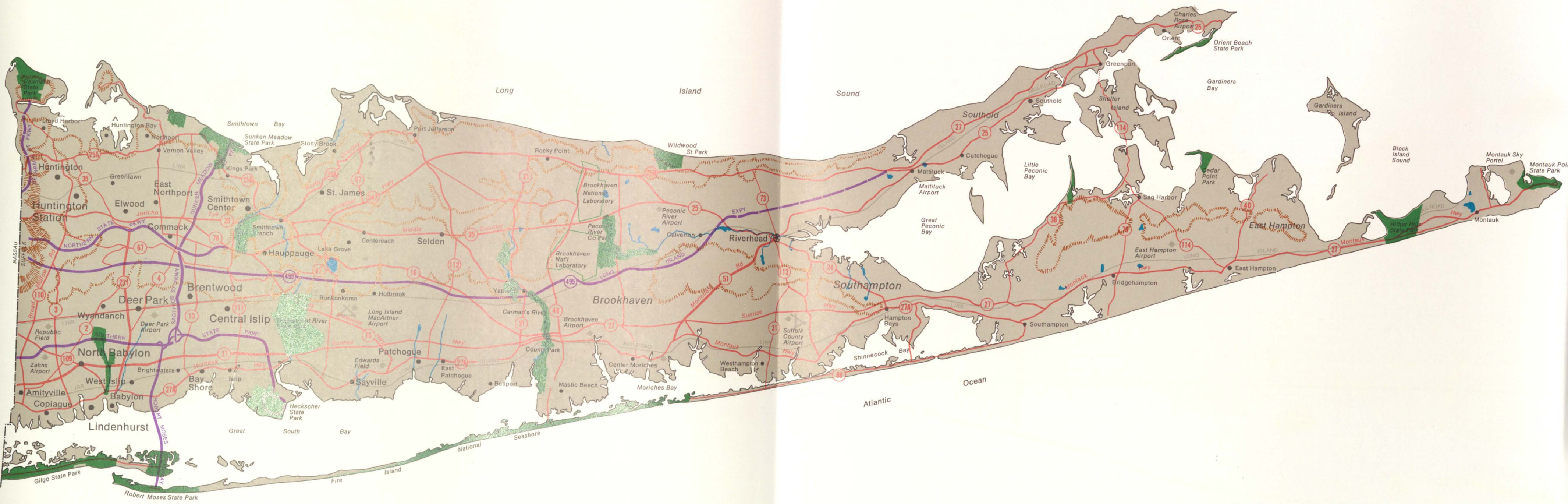
Floor Space in Existing Structures, 1963*	
	Floor Space (Thousands of Square Feet)
<b>Manufacturing Activity</b>	<b>8,467</b>
Lumber	93
Furniture	647
Stone, clay & glass	185
Primary metals	27
Fabricated metals	208
Machinery, except electrical	117
Electrical machinery	376
Transportation equipment	260
Professional scientific equipment	154
Miscellaneous durables	1,128
<b>Food</b>	<b>91</b>
Tobacco	—
Textiles	414
Apparel	605
Paper	632
Printing & publishing	235
Chemicals	3,096
Petroleum	3
Rubber	170
Leather	26
<b>Warehousing, Trucking &amp; Wholesaling</b>	<b>689</b>
Warehousing	240
Trucking	25
Food wholesaling	40
Other wholesaling	384
<b>Total</b>	<b>9,156</b>

Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, almost 2.4 million square feet of industrial and warehouse floor space has been put in place in Rockland County.

Rockland County Industrial Parks Municipality—Name Developer	Acreage			Improvements				Transport Orientation*					Other Data	
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			
											Commercial	General	Port Facility	
Congers—Congers Industrial Park Milan Associates 159 Northern Boulevard Great Neck, New York	56	33	3	X	X	X	X		X			X	X	Build-to-Suit, Lea 4 Miles from Thruway
Haverstraw—Haverstraw Industrial Park Prel Corporation Prel Plaza Orangeburg, New York	44	44	0	X		X	X		X			X	X	Lease, Sell, Build- to-Suit
Orangeburg—Ramland Industrial Park Prel Corporation Prel Plaza Orangeburg, New York	50	50	0	X	X	X	X	X	X			X	X	Lease, Sell, Build- to-Suit
Orangeburg—Rockleigh Industrial Park McBride Enterprises 808 High Mountain Road Franklin Lakes, New Jersey	92	55	1	X	X	X	X	X	X	X		X	X	Lease, Sell
Pearl River—Pearl River Industrial Park Cross and Brown 522 Fifth Avenue New York, New York	181	151	3	X	X	X	X	X	X			X	X	Package Financing Two Plants
Sparkill—Sparkill Industrial Park Prel Corporation Prel Plaza Orangeburg, New York	52	52	0	X	X	X	X	X	X	X		X	X	Lease, Sell, Build- to-Suit
Stony Point—Stony Point Industrial Park Holt Industrial Development Corporation 50 E. Washington Avenue Pearl River, New York	48	30	4	X	X	X	X		X	X		X	X	Lease-Back, Sell, Lease Four Plants
Tallman—DGS Industrial Park Sheldon Goldstein P.O. Box 1 Monsey, New York	30	30	0	X	X	X	X	X	X			X	X	
Valley Cottage—West Rock Industrial Park Feuer Transportation Company Federal & Knoll Streets Yonkers, New York	110	110	0	X	X	X	X	X	X	X		X	X	

\*Determined by means of criteria listed on page 124



Cities and Towns  
with 1970 Approximate Populations

Under 10,000	•	Over 100,000	City
10,000-25,000	•		
25,000-100,000	•	County Seat	⊙

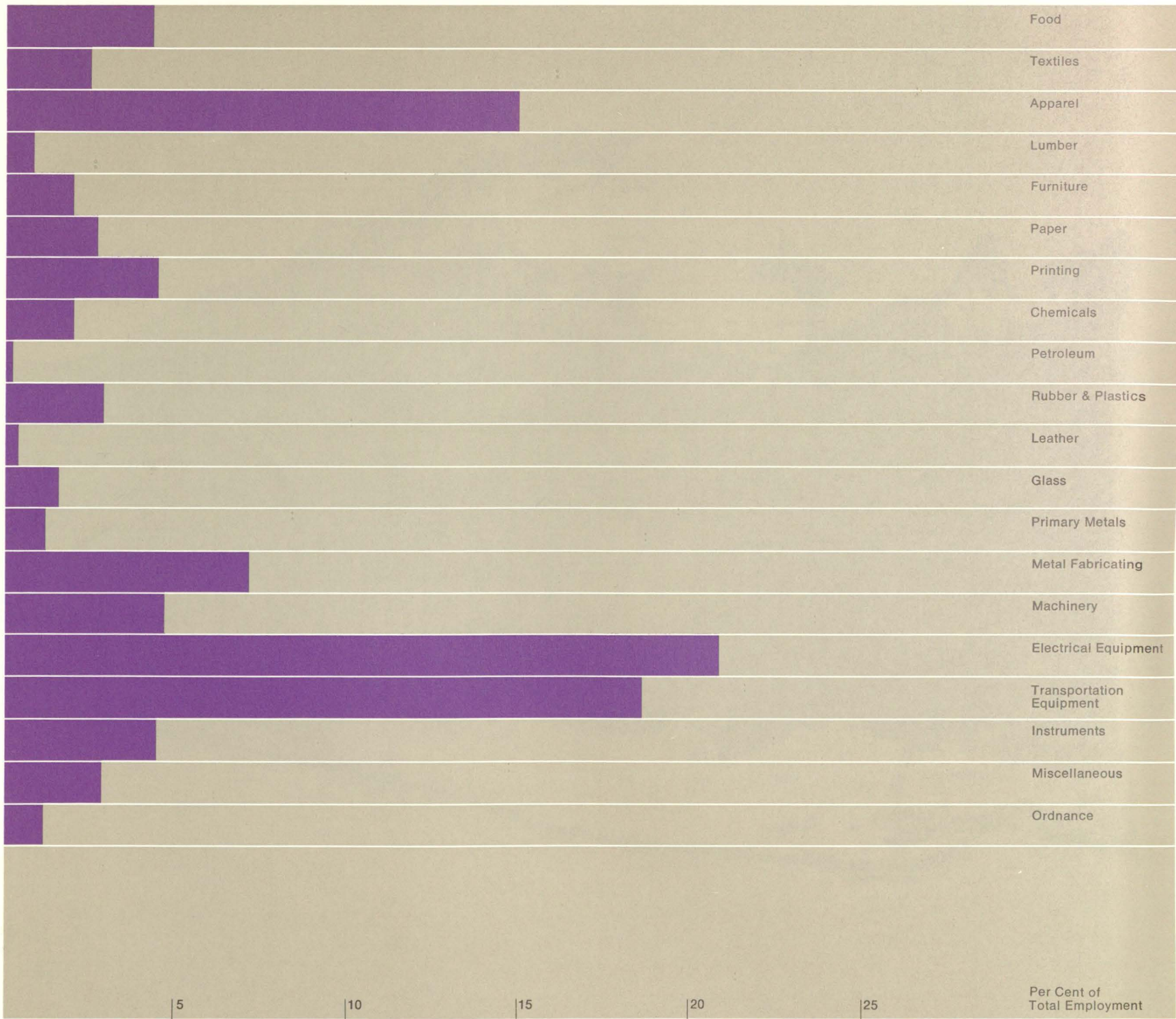


0 1 2 Miles

## Suffolk County

Area in Square Miles	922
Population	1,127,000
Total Jobs –	229,900
In Manufacturing	48,800
Number of Plants –	1,475
With 20 or More Employees	477
Value of Shipments (Millions) \$	1,035.3
Value Added (Millions) \$	589.9
Capital Expenditures for New Plant & Equipment (Millions)	\$ 22.9
Central Administrative Units of Manufacturing Firms:	
Number	13
Employment	600

Graph 43  
Industrial Profile of Suffolk



## Suffolk County

## Total Industrial Land

Permitted Uses	Vacant & Zoned Industrial	Redevelopment Land	Total
Light Industry (Acres)	23,215	2,858	26,073

## Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
Vacant & Zoned Industrial								
No. of Tracts	35	58	42	38	16	10	11	210
Acres	251	1,050	1,573	3,090	2,219	2,993	12,039	23,215

## Redevelopment Land

No. of Tracts	—	—	—	1	1	5	2	9
Acres	—	—	—	60	172	1,315	1,311	2,858

## Total

No. of Tracts	35	58	42	39	17	15	13	219
Acres	251	1,050	1,573	3,150	2,391	4,308	13,350	26,073

## Transportation Orientation

Acres	Freeway	Major Highway	Rail	Commercial Airport	General Airport	Port Facility	Waterfront* 35' or More	9'-18'
1,250	X	X	X	X	X			
1,037	X	X	X				X	
38	X	X	X					X
797	X	X	X					
9	X							X
22,663	X							
279						X		
Total								
26,073								

Source: Suffolk County Department of Planning.

\*Water Depth at Mean Low Tide.

## Floor Space in Existing Structures, 1963\*

	Floor Space (Thousands of Square Feet)
Manufacturing Activity	12,726
Lumber	516
Furniture	675
Stone, clay & glass	798
Primary metals	270
Fabricated metals	1,493
Machinery, except electrical	961
Electrical machinery	1,050
Transportation equipment	1,139
Professional scientific equipment	1,136
Miscellaneous durables	667
Food	674
Tobacco	—
Textiles	177
Apparel	757
Paper	259
Printing & publishing	359
Chemicals	345
Petroleum	458
Rubber	992
Leather	—
Warehousing, Trucking & Wholesaling	3,192
Warehousing	749
Trucking	301
Food wholesaling	356
Other wholesaling	1,786
Total	15,918

Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, 12 million square feet of industrial and warehouse floor space has been put in place in Suffolk County.

## Suffolk County

Suffolk County Industrial Parks Municipality—Name Developer	Acreage			Improvements				Transport Orientation*					Other Data	
	Total	Unoccupied	Number of Occupants	Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport			
											Commercial	General	Port Facility	
Amityville—Amityville Industrial Park Erick Builders Amityville, New York	34	0	25	X	X	X	X		X	X		X	X	27 Buildings, Lease only
Bohemia—Airport International Plaza Donald Rechler 1295 Northern Boulevard Manhasset, New York	88	40	12	X	X	X	X	X	X			X	X	Lease, Sell, Build-to-Suit
Brookhaven—Modular Industrial Mall Jerry Krinsky Associates 464 Suffolk Avenue Brentwood, New York	46	17	10	X	X	X	X		X			X	X	Zoned Industrially, Sell, Lease, Build-to-Suit
Deer Park—West Suffolk Industrial Park No. 1 Marcus Associates 140 Smith Street Farmingdale, New York	52	1	21	X	X	X	X	X	X	X		X	X	Financing 24 Bldgs., 3 Miles to Long Island Expressway
Farmingdale—Industrial Court A. Levine 1919 Broadhollow Road Farmingdale, New York	95	95	0	X	X	X	X	X	X	X		X	X	Lease, Sell, Build-to-Suit
Farmingdale—Industrial Haven 270 Broadhollow Road Farmingdale, New York	60	59	1	X		X	X	X	X			X	X	Lease, Sell, Build-to-Suit
Farmingdale—Route 110 Expressway Industrial Park Marcus Associates 140 Smith Street Farmingdale, New York	81	81	0	X	X	X	X		X			X	X	Sixty Buildings
Hauppauge—Americana Industrial Park J. Lazarus Associates 960 Broadway Hicksville, New York	34	34	0	X		X	X	X	X			X	X	Lease, Sell, Build-to-Suit
Hauppauge—Expressway Industrial Park N. Racanelli Construction Company 175 Sweet Hollow Road Old Bethpage, New York	30	30	0	X		X	X	X	X			X	X	Sell, Lease, Build-to-Suit
Hauppauge—Marcus Industrial Park at Smithtown Marcus Associates 140 Smith Street Farmingdale, New York	108	5	30	X	X	X	X	X	X			X	X	23 Buildings
Hauppauge—Vanderbilt Industrial Park Vanderbilt Industrial Park, Inc. 1295 Northern Boulevard Manhasset, New York	375	170	75	X		X	X	X	X			X	X	Zoned Industrially, Sell, Lease, Build-to-Suit
Islip—Cardinal Industrial Park Kell Manufacturers Gilpin Avenue Hauppauge, New York	60	20	12	X	X	X	X	X	X			X		Lease, Sell, Build-to-Suit
Islip—Central Islip Industrial Park Commercial Industrial Developers 1919 Route 110, South Farmingdale, New York	38	28	1	X	X	X	X	X	X	X		X	X	One Building
Islip—Islip Industrial Park S. Malman 80 Clover Drive Great Neck, New York	400	400	0	X	X	X	X	X	X			X	X	Lease, Sell, Build-to-Suit

\*Determined by means of criteria listed on page 124

Suffolk County Industrial Parks Municipality—Name Developer	Acreage		Number of Occupants	Improvements				Transport Orientation*			Airport		Other Data	
	Total	Unoccupied		Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Commercial	General		Port Facility
Melville—Jerry Spiegel at Melville Jerry Spiegel Associates 270 N. Broadway Hicksville, New York	40	40	0	X	X	X	X	X	X			X	X	Lease Only
Melville—Melville Quadrangle Office Park We're Associates 3000 Marcus Avenue New Hyde Park, New York	117	42	50	X	X	X	X	X	X			X	X	Sell, Lease, Build- to-Suit
Melville—Melville Industrial Park Melville Industrial Associates 1919 Broadhollow Road Farmingdale, New York	106	16	15	X	X	X	X	X	X	X		X	X	17 Buildings, Sell, Lease, Build-to-Suit
Melville—Racanelli Associates of Melville Racanelli Construction Company 175 Sweet Hollow Road Old Bethpage, New York	43	40	3	X		X	X	X	X			X	X	Sell, Lease, Build- to-Suit
Ronkonkoma—MacArthur Airport Executive Center Airport Cargo Center Airline Terminal MacArthur Airport Ronkonkoma, New York	120	117	1	X	X	X	X	X	X	X		X		Lease, Sell, Build- to-Suit

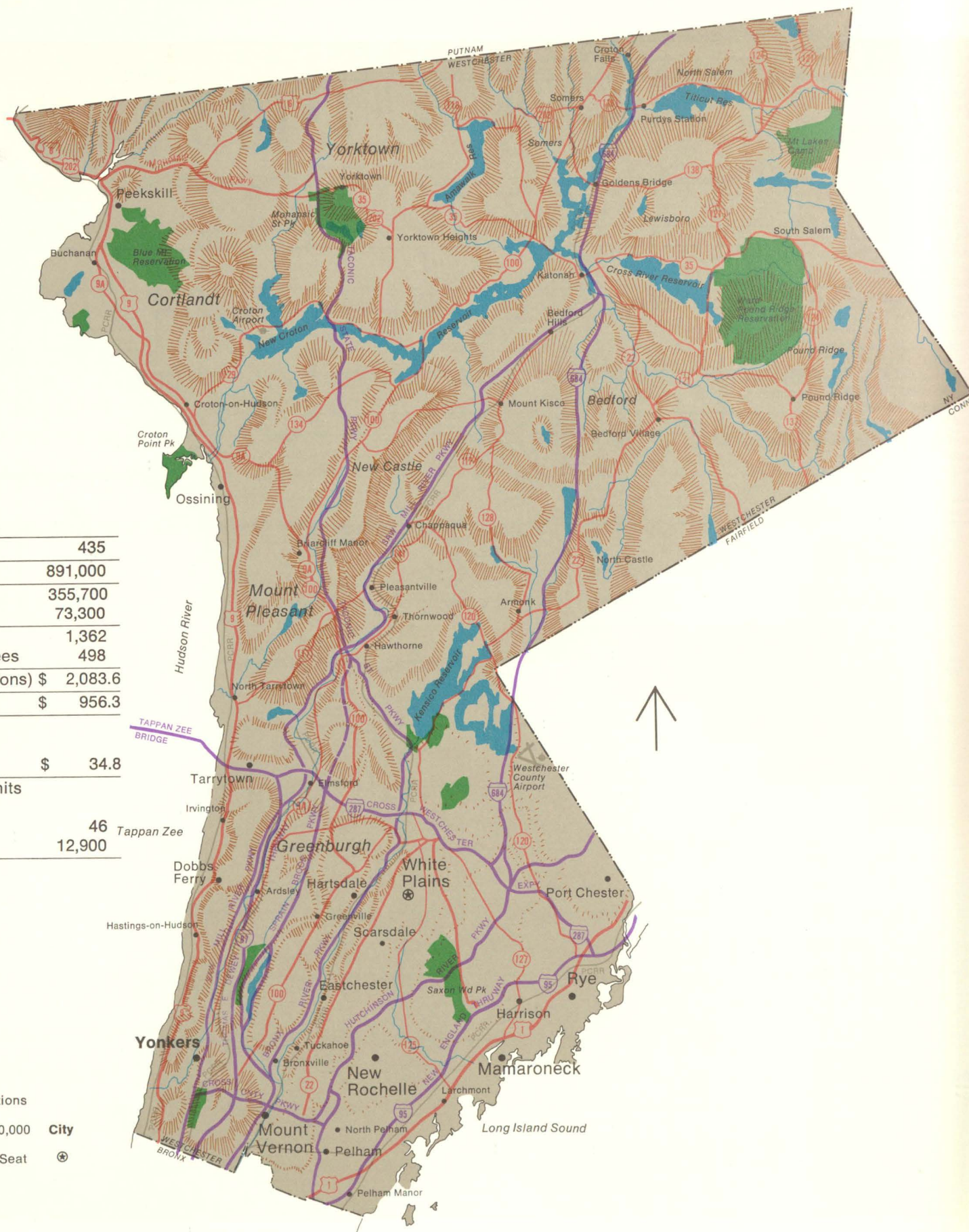
\*Determined by means of criteria listed on page 124

Area in Square Miles	435
Population	891,000
Total Jobs –	355,700
In Manufacturing	73,300
Number of Plants –	1,362
With 20 or More Employees	498
Value of Shipments (Millions) \$	2,083.6
Value Added (Millions) \$	956.3
Capital Expenditures for New Plant & Equipment (Millions)	\$ 34.8
Central Administrative Units of Manufacturing Firms:	
Number	46
Employment	12,900

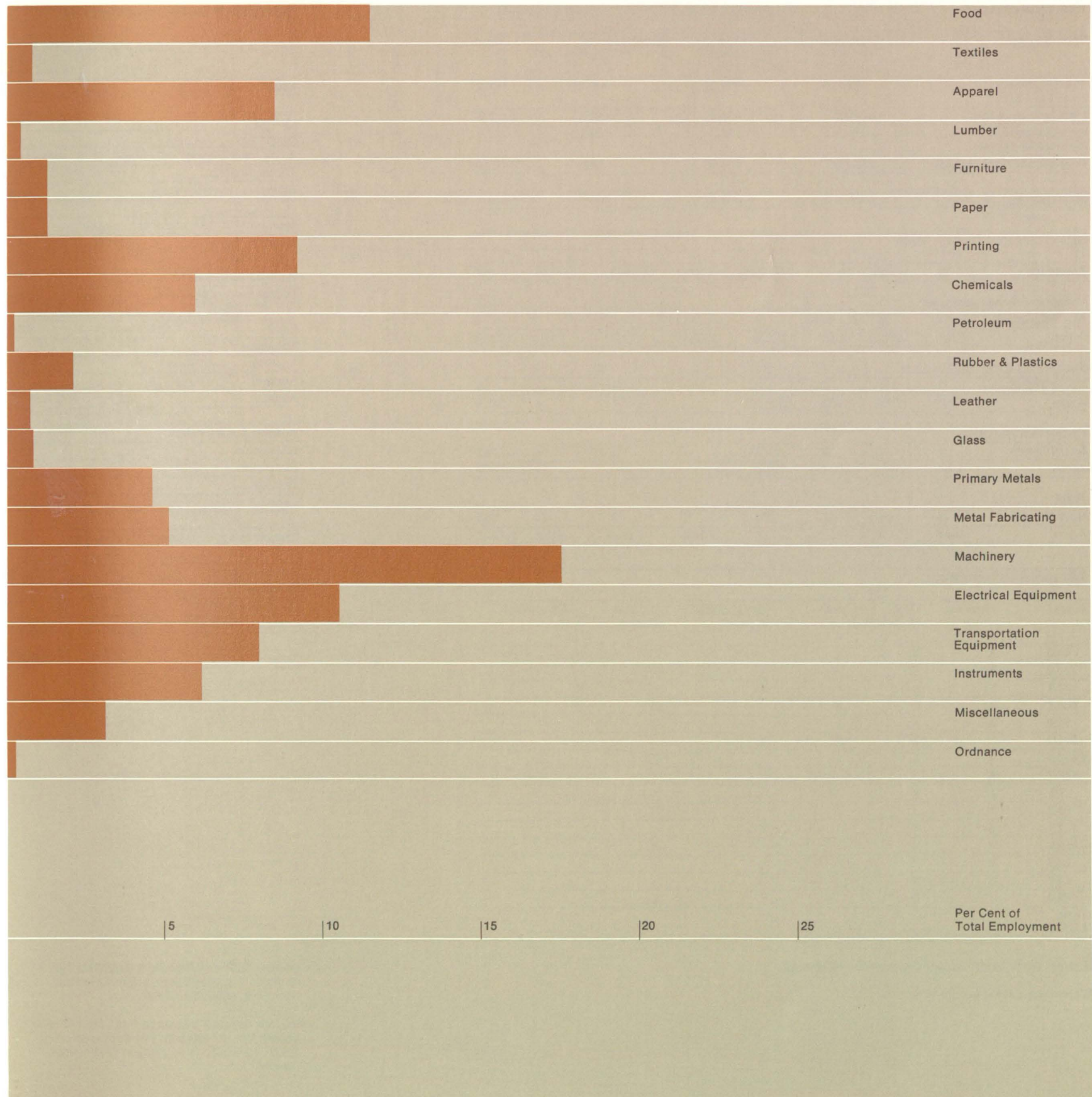
Cities and Towns  
with 1970 Approximate Populations

Under 10,000 •      Over 100,000 City  
10,000-25,000 •      County Seat ⊕

0 1 2 Miles



Graph 44  
 Industrial Profile of Westchester



Total Industrial Land				
Permitted uses	Vacant & Zoned Industrial	Vacant, Not Zoned But Suitable	Redevelopment Land	Total
Medium/ Heavy Industrial (Acres)	405.8	109.3	49.1	564.2
Light Industry (Acres)	1,908.0	152.4	67.1	2,127.5
Warehousing and Distribution (Acres)	314.0	54.2	144.9	513.1
Research & Office (Acres)	2,172.5	224.0	58.5	2,455.0
<b>Total (Acres)</b>	<b>4,800.3</b>	<b>539.9</b>	<b>319.6</b>	<b>5,659.8</b>

## Size of Industrial Tracts in Acres

Tract Size	1-10	11-25	26-50	51-100	101-200	201-400	401-Plus	Total
Vacant and Zoned Industrial								
No. of Tracts	17	34	19	18	4	3	1	96
Acres	123.0	559.2	645.5	1,149.5	629.0	775.9	918.2	4,800.3

## Vacant, Not Zoned But Suitable

No. of Tracts	3	8	4	4	—	—	—	19
Acres	23.0	129.5	143.2	244.2	—	—	—	539.9

## Redevelopment Land

No. of Tracts	8	2	2	3	—	—	—	15
Acres	44.6	30.5	60.4	184.1	—	—	—	319.6

## Total

No. of Tracts	28	44	25	25	4	3	1	130
Acres	190.6	719.2	849.1	1,577.8	629.0	775.9	918.2	5,659.8

## Transportation Orientation

Acres	Freeway	Major Highway	Rail	Commercial Airport	General Airport	Waterfront* 35' or More	9'-18'
45.9	X	X	X		X	X	X
180.2	X	X	X	X	X		
33.1	X	X	X	X		X	
564.7	X	X	X		X	X	
91.8	X	X	X		X		X
261.9	X	X	X	X			
1,495.4	X	X	X		X		
148.7	X	X		X	X		
18.3	X	X			X	X	
64.3	X		X		X	X	
122.1	X	X		X			
2,456.2	X	X			X		
87.2	X		X		X		
25.7	X	X					
64.3		X			X		
<b>Total</b>							
5,659.8							

Source: Westchester County Department of Planning.

\*Water Depth at Mean Low Tide

## Floor Space in Existing Structures, 1963\*

	Floor Space (Thousands of Square Feet)
Manufacturing Activity	20,277
Lumber	310
Furniture	534
Stone, clay & glass	183
Primary metals	303
Fabricated metals	1,852
Machinery, except electrical	1,677
Electrical machinery	1,657
Transportation equipment	298
Professional scientific equipment	1,916
Miscellaneous durables	1,814
Food	2,616
Tobacco	—
Textiles	205
Apparel	874
Paper	1,502
Printing & publishing	1,159
Chemicals	2,178
Petroleum	481
Rubber	602
Leather	116
Warehousing, Trucking & Wholesaling	6,771
Warehousing	1,458
Trucking	697
Food wholesaling	853
Other wholesaling	3,763
<b>Total</b>	<b>27,048</b>

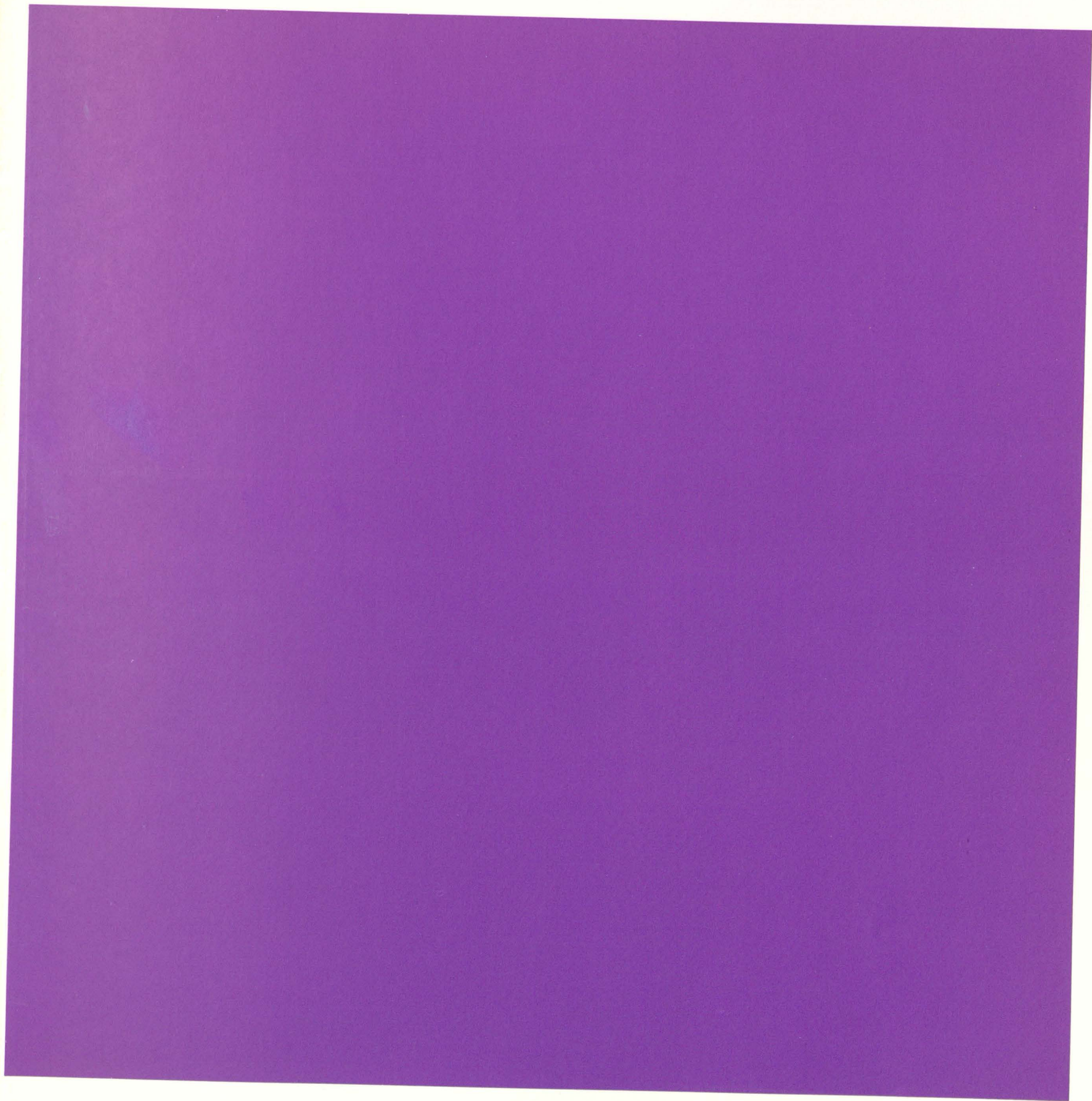
Source: 1963 Land Use Inventory, Tri-State Regional Planning Commission, New York, New York, unpublished data.

\*It is our estimate that since 1963, over 10 million square feet of industrial and warehouse floor space has been put in place in Westchester County.

Westchester County Industrial Parks Municipality—Name Developer	Acreage		Number of Occupants	Improvements				Transport Orientation*					Other Data		
	Total	Unoccupied		Water	Sewage	Gas	Electric	Freeway	Highway	Rail	Airport Commercial General			Port Facility	
Greenburgh—Cross Westchester Executive Park Robert Martin Associates 77 Tarrytown Road White Plains, New York	65	10	50	X	X	X	X	X	X				X	X	Lease Only
Greenburgh—Fairview Industrial Park Realty Equities Corporation of New York 375 Park Avenue New York, New York	142	100	5	X	X	X	X		X	X			X	X	Lease-Back Building, Sell, Lease
Harrison—Corporate Park Shulman Investment Company 4 Corporate Park Drive White Plains, New York	50	0	14	X	X	X	X	X	X				X	X	Lease Only
Harrison—Saxon Woods Office Center Edward M. Verdes & Son 190 East Post Road White Plains, New York	25	10	8	X	X	X	X	X	X				X	X	Lease Only
Yorktown—Yorktown Industrial Park Yorktown Industrial Park, Inc. Post Office Box 68 Yorktown Heights, New York	115	100	1	X	X	X	X		X				X	X	Lease Only, Build- to-Suit

\*Determined by means of criteria listed on page 124





A comprehensive network of air, sea, rail and truck routes serves the Metropolitan Area. A total of fifty-four airlines, fifteen railroads, 421 certified motor carriers and 184 steamship lines provide transportation services of sufficient depth to meet shippers' requirements in any conceivable transportation situation.

The Metropolitan Area itself makes large demands for its services of supply and distribution. It also functions as a major transshipment center for goods moving through the Area in foreign commerce. This dual function has given rise to public and private terminal facilities geared to the handling of large freight flows. The industrialist located in the Metropolitan Area has available to him unique concentrations of transport facilities for serving the Area itself and for reaching the most remote markets.

Public and private investment in the Area's terminal facilities has been commensurate with the transportation volumes that are served. Expansion and modernization have been the keynote, with planning and investment carried forward on a continuing basis to meet the Area's changing transportation needs for many years to come.

The first map presents a broad view of the land access available from the Area to the markets of New England, the Midwest and the Southeast. This map also depicts the extent of the Overnight Truck Delivery Zone, within which motor carriers assure delivery before the start of the next business day.

The second map focuses on the Area itself and depicts the location of piers, airports, railroads and major arterial highways.







The Metropolitan Area's three major airports, Kennedy, Newark and La Guardia, all operated by The Port of New York Authority, form an integrated air terminal system—complemented by thirty-three general aviation airports—that assures travelers and shippers maximum flexibility in the use of air transportation. Fifty-four domestic and foreign airlines provide direct cargo and passenger service to over four hundred points throughout the world. Weekly service at the three airports includes more than 1,100 scheduled overseas departures plus 155 all-cargo flights and 5,550 flights (260 all-cargo) to domestic points. In 1970, 37.4 million passengers and about a million tons of cargo moved through the air gateways. The three airports are becoming increasingly important in foreign trade. In 1970, they handled 56 per cent of the Nation's airborne exports and 55 per cent of the imports, valued together at \$5.1 billion.

John F. Kennedy International Airport covers about 5,000 acres near the Queens-Nassau border. Its facilities have been expanded many times and its four long runways, up to 2½ miles in length, can accommodate the heaviest long-haul jets. The airport continues to grow with \$650 million in construction funds committed or projected for new passenger and cargo facilities and other improvements.

More than 19 million passengers, of which almost half were overseas travelers, were accommodated at Kennedy's 850-acre Terminal City in 1970. This site contains the International Arrivals Building, two adjacent airline wing buildings for foreign-flag airlines, and eight individual airline terminals. Terminal City also includes a recently enlarged passenger terminal for the numerous domestic and foreign supplemental or charter airlines. Kennedy is the prime national gateway, serving international traffic moving to and from every corner of the globe, as well as the domestic long-haul market.

Kennedy is the busiest air cargo center in the world, with thirteen large cargo buildings utilizing the latest and most automated devices for processing and handling air freight. Cargo-handling capacity will be tripled in the next five years and the cargo center area expanded to 400 acres from its present 159 acres. Thirty-eight airlines have facilities here along with some sixty freight forwarders, customs brokers and cartage firms to assist the shipper and consignee in speeding the flow of cargo. Centralized government services, including customs appraisal, are also present to facilitate the clearance of incoming shipments. Over half of the Nation's airborne exports and imports pass through Kennedy International Airport.

Newark Airport is convenient to the industrial heartland of Northern New Jersey, a few minutes from downtown Newark, and only twenty minutes from mid-town Manhattan. This airport is being virtually rebuilt to meet a demand for air travel which is expected to double over the next decade. Newark offers a full range of domestic flights and is also handling an increasing amount of Caribbean traffic.

The \$200 million redevelopment project includes three new passenger terminals, 83 new aircraft gate positions, more than 14 miles of new access and service roads, parking space for 12,000 cars, the lengthening of two runways, and construction of a third.

The air cargo center at Newark Airport is one of the largest in the world, with almost 170,000 tons of cargo smoothly moving through its four large terminal buildings last year. The services of some eighteen express and freight forwarders are available, and the airport has a large airmail facility.

La Guardia Airport, built in 1939, was recently redeveloped at a cost of \$120 million. The major features of the new airport are the new terminal building, seven times larger than the former structure; the multi-level roadways; the modern control tower; and the extension of its two major runways. The airport is located in Queens, adjacent to the Grand Central Parkway. This location, only twenty-five minutes from mid-town Manhattan, and the hourly "shuttle" service to Washington and Boston make La Guardia particularly popular with commuting businessmen. Although this airport does not have all-cargo flights, cargo service is available on passenger flights.

Scheduled Air Carrier Service  
From New York-Northeastern New Jersey  
as of July, 1970

Air Carrier	All Destinations All Flights	Number of Departures Per Week To:			
		Continental U.S., Canada, Mexico		Overseas	
		Passenger- Cargo	All Cargo	Passenger- Cargo	All Cargo
<i>Domestic</i>					
Allegheny Airlines	310	310	—	—	—
American Airlines	1,234	1,160	74	—	—
Delta Airlines	192	187	5	—	—
Eastern Airlines	1,232	1,088	35	109	—
Flying Tiger Line	22	—	16	—	6
Mohawk Airlines	444	444	—	—	—
National Airlines	383	383	—	—	—
Northeast Airlines	207	193	—	14	—
Northwest Airlines	214	183	9	15	7
Ozark Airlines	20	20	—	—	—
Pan American World Airways	281	—	—	253	28
Piedmont Airlines	61	61	—	—	—
Seaboard World Airlines	23	—	—	—	23
Southern Airways	35	35	—	—	—
Trans World Airlines	769	595	32	129	13
United Airlines	752	662	63	25	2
<i>Foreign</i>					
Aer Lingus	25	—	—	25	—
Air Canada	124	124	—	—	—
Air France	38	6	—	28	4
Airlift	22	—	11	—	11
Alitalia Airlines	41	—	—	35	6
Braniff Int'l Airways	110	84	15	10	1
British Overseas Airways	77	—	—	68	9
British West Indies Airlines	12	—	—	12	—
El Al Israel Airlines	26	—	—	26	—
Iberia Airlines of Spain	21	—	—	21	—
Icelandic Airlines	22	—	—	22	—
Japan Airlines	17	—	—	11	6
KLM—Royal Dutch Airlines	52	—	—	39	13
Lufthansa—German Airlines	44	—	—	35	9
Olympic Airways	15	—	—	15	—
Sabena	28	—	—	23	5
Scandinavian Airlines System	30	—	—	26	4
Swissair	24	—	—	24	—
Trans Caribbean Airways	63	—	—	58	5
All Other Carriers	88	9	—	76	3
All Flights	7,058	5,544	260	1,099	155

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 Weekly Scheduled Non-Stop Flights  
 to Principal Cities  
 July, 1970
 

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City	Passenger- Cargo	All- Cargo
Atlanta	187	10
Boston	447	36
Chicago	428	56
Cincinnati	65	5
Cleveland	133	11
Dallas	63	20
Denver	49	—
Detroit	197	55
Houston	48	—
Kansas City, Mo.	40	—
Los Angeles	179	28
Miami	308	11
Minneapolis/St. Paul	28	1
New Orleans	49	5
Philadelphia	112	8
Pittsburgh	197	5
St. Louis	74	10
San Francisco/Oakland	130	17
Seattle	28	—
Washington, D.C.	454	4

Foreign		
Amsterdam	56	12
Brussels	26	5
Copenhagen	17	—
London	105	25
Glasgow/Manchester	18	8
Paris	65	3
Frankfurt/Munich	28	14
Rome/Milan	63	6
Lisbon/Madrid	53	—
Geneva/Zurich	36	—
Toronto/Montreal	234	—
Mexico City	27	—
Rio de Janeiro/Buenos Aires	20	—

In Addition To Non-Stop Service,  
 Cities Are Served by Numerous Other Flights

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Limited short-haul airline service is also available at the thirty-three general aviation airports located throughout the Metropolitan Area. Air taxi service, both scheduled and chartered, is available at several of these airports into the three major airports, and a few of the air taxis offer scheduled service to points outside the Area as well. Each general aviation airport has at least one operator to provide maintenance and service to corporate and private planes.

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 General Aviation Airports in the  
 Metropolitan Area
 

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 In New Jersey:
 

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County	Facility
Bergen	Teterboro
Essex	Caldwell-Wright
Middlesex	Hadley (South Plainfield)
Monmouth	Colts Neck Monmouth County (Wall Twp.) Preston (Marlboro Twp.) Red Bank Asbury Park Air Terminal (Neptune Twp.)
Morris	Hanover Lincoln Park Morristown Towaco
Passaic	Greenwood Lake
Somerset	Manville-Kupper Princeton (Rocky Hill) Somerset (Bedminster Twp.) Somerset Hills (Basking Ridge)
Union	Linden

 In New York:
 

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County	Facility
Queens	Flushing
Rockland	Ramapo Valley (Spring Valley)
Suffolk	Zahns (Amityville) Edwards' (Bayport) Deer Park East Hampton Spadero (East Moriches) Republic (Farmingdale) Elizabeth Field (Fishers Island) MacArthur (Islip) Sky Portel (Montauk) Charles Rose (Orient) Brookhaven (Shirley) Suffolk County (Westhampton Beach)
Westchester	Westchester County (White Plains)

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The marine transportation requirements of manufacturers located in the Area are served by the Port of New York, which is North America's principal gateway for international commerce. It is really a "port of many ports," consisting of a 1,500 square mile area where numerous bays, rivers and harbors join with the ocean to make a vast freight platform. It offers many service advantages, which include:

Eight separate bays, linked by deep-water channels with the main channel to the Atlantic Ocean.

Main channels of sufficient depth to handle the largest ocean-going ships.

A huge protected anchorage in the Upper Bay.

650 miles of waterfront, ideally suited for the docking of all types of vessels.

Four hundred deep-water berths providing unsurpassed terminal facilities, improved by a vast modernization program over the last twenty years.

Specialized terminals to accommodate general, bulk and containerized cargo.

Excellent ship repair facilities.

A constant supply of well-trained personnel, both sea-going and shoreside.

Every year, over 20,000 oceangoing vessel movements are recorded at the bi-state Port—one ship every twenty minutes around the clock—twice as many as the Nation's second busiest port. In 1970, the Port handled 57 million tons of foreign and domestic waterborne cargo. The foreign trade component was valued at \$15.4 billion, 31 per cent of the total for the Nation.

The bi-state Port leads the Nation in frequency and directness of steamship service. The accompanying tables present some details of the origins and destinations of vessels calling at New York.

Comparison of Steamship Service For An Average 31 Day Period From The Ports of New York, Baltimore, and New Orleans to Selected European Ports

	Number of Sailings			Average Transit Time (Days)	
	Total Sailings	Directly Overseas	Direct to Specific Overseas Destination	All Overseas Sailings	Direct to Specific Overseas Destination
New York-Havre	28	25	13	13	7.5
Baltimore-Havre	17	3	1	15	9
New Orleans-Havre	13	10	—	21	—
New York-Hamburg	29	25	5	17	11
Baltimore-Hamburg	20	5	1	25	16
New Orleans-Hamburg	14	10	—	28	—
New York-London	9	8	3	13	10
Baltimore-London	2	1	1	13	11
New Orleans-London	4	1	1	23	18
New York-Oslo	8	8	2	14	9.5
Baltimore-Oslo	3	—	—	21	—
New Orleans-Oslo	3	3	—	31	—
New York-Copenhagen	15	13	1	15	10
Baltimore-Copenhagen	10	—	—	21	—
New Orleans-Copenhagen	5	3	—	28	—
New York-Liverpool	13	10	7	9	9
Baltimore-Liverpool	2	—	—	16.5	—
New Orleans-Liverpool	4	—	—	29	—
New York-Antwerp	44	40	19	11.5	9
Baltimore-Antwerp	24	—	—	19	—
New Orleans-Antwerp	14	7	2	25	15
New York-Rotterdam	43	42	12	12	9
Baltimore-Rotterdam	22	2	1	19	12
New Orleans-Rotterdam	18	7	1	23	15

Total Sailings includes sailings Directly Overseas and sailings Direct to Specific Destination.

Source: New York Journal of Commerce, Shipping Digest and Lloyd's Shipping Index Voyage Supplement.

Vessel Activity at the Port of New York  
by Trade Area in 1970

Type of Vessel		Arrivals	Departures
1. Tankers	Domestic Ports	1,321	1,340
	Foreign Ports	1,537	1,474
	Total Tankers	2,858	2,814
2. Dry Cargo Ships	Domestic Ports	1,781	2,090
	Foreign Ports	5,699	5,508
	African (West Coast)	78	81
	African (South & East Coast)	108	124
	Australia and New Zealand	109	118
	Canada	428	425
	Central America	438	398
	Far East	833	661
	Iceland and Greenland	19	28
	India and Persian Gulf	125	191
	Mediterranean	619	567
	South America (East Coast)	230	269
	South America (West Coast)	237	269
	United Kingdom & Northern Europe	1,258	1,113
	West Indies & North Coast of South America	1,217	1,264
	Total Dry Cargo	7,480	7,598
Total Vessels		10,338	10,412

Vessel Movements at Leading United States  
Ports, 1970

Port	Arrivals	Departures
New York	10,338	10,412
Philadelphia	5,817	5,810
San Francisco	4,642	4,641
Los Angeles	5,022	4,970
Hampton Roads	4,882	4,855
New Orleans	4,630	4,485
Baltimore	4,661	4,658
Houston	4,009	4,046
Seattle	2,481	2,474
Portland, Oregon	2,019	2,015
Boston	1,736	1,679
Total	50,237	50,045

Source: The Maritime Association of the Port of New York.

Steamship Lines Providing Container Services  
at the Port of New York

Line	Trade Routes
American Export Isbrandtsen Lines	North European, Far East, Mediterranean
Amerind Shipping Corporation	Bermuda
Atlantic Lines	Caribbean
Atlantic Container Line, Ltd.	North European
American President Lines	Far East
Atlanttrafik Express Service	Australia
Azores Steamship Line	Iberia
Blue Star Line	Australia
Caribbean Trailer Express Line	Jamaica, Dominican Republic
China Union Lines	Far East
Columbus Line	Australia, New Zealand
Dart Containerline	North European
Dominican Steamship Service	Dominican Republic
Dominican Container Line	Dominican Republic
Fabre Line	Mediterranean
Farrell Lines	Australia
Fassio Line	Mediterranean
Finn Lines	North European
Gran Colombiana	West Coast South America, Guatemala
Hansa Line	Mediterranean
Hellenic Lines, Ltd.	Near East
Ivaran Lines	South American
Jamaica Container Line	Jamaica
Japan Line	Japan
"K" Line	Japan
Maersk Line	Far East
Manchester Lines/Irish Shipping, Ltd.	Ireland, England
Maritime Co. of the Philippines	Philippines
Mitsui O.S.K. Lines	Japan
Moore McCormack Lines, Inc.	South America, North European, South Africa
N.Y.K. Line—Nippon Yusen Kaisha	Japan
Orient Overseas Line	Far East
Polish Ocean Line	North European
Prudential-Grace Lines, Inc.	Caribbean, Mediterranean, West Coast South America
Royal Netherlands Steamship Lines	Caribbean, West Coast Central America
Sea-Land Service	Mediterranean, Caribbean, North European, Panama, Puerto Rico
Seatrains Lines, Inc.	North European, Puerto Rico
Spanish Line	Spain
Trom Lines	Iberia, Lebanon, Egypt
United Philippine Lines	Far East
United States Line	Far East, North European
Viking Line	Venezuela, Trinidad
Yamashita-Shinnihon	Japan, Hong Kong

There are 184 steamship lines that call at the bi-state Port, offering accommodations for all types of cargo. Containerized cargo can now be handled at five terminals:

Port Newark

the Elizabeth-Port Authority Marine Terminal

the American Export-Isbrandtsen (Howland Hook, Staten Island) Terminal

the City of New York's Stapleton, Staten Island facility

the Seatrain facility at Weehawken, New Jersey

Fifteen railroads serve the Metropolitan Area. Seven long-haul railroads provide freight service to New England, to the Midwest, to the South and, by means of interline connections, to the entire continent. The remaining eight short-line carriers perform the important functions of internal collection, distribution and linkage with the long-haul lines.

Sixty scheduled freight trains arrive and depart daily from the Metropolitan Area, supplemented by numerous specialized trains. Inbound, the latter include unitized trains of high-volume commodities—fuels, autos, produce, etc.—while on the outbound side, trains carrying a wide variety of containerized cargoes move directly to all the main cities of the Country. In fact, piggyback service is available between the Metropolitan Area and the Pacific Coast.

<p>The Baltimore &amp; Ohio-Chesapeake &amp; Ohio Railroad Company                  General Office, Freight Traffic Department                  25 Broadway                  New York, New York 10004</p>	<p>Serves the District of Columbia and thirteen eastern and central states, including the Cities of Baltimore, Buffalo, Chicago, Cincinnati, Cleveland, Indianapolis, Louisville, Philadelphia, Pittsburgh, Rochester, St. Louis, Toledo, Washington, Wilmington, and Youngstown.</p>
<p>The Erie-Lackawanna Railroad Company                  General Office, Freight Traffic Department                  111 Newark Street                  Hoboken, New Jersey 07030</p>	<p>Serves Akron, Buffalo, Chicago, Cleveland, Rochester, Syracuse, and Youngstown, connecting with railroads serving other points throughout the entire Nation and Canada.</p>
<p>The Central Railroad Company of New Jersey                  General Office, Freight Traffic Department                  1100 Raymond Boulevard                  Newark, New Jersey 07102</p>	<p>Serves fifteen of New Jersey's twenty-one counties, part of eastern Pennsylvania connecting with railroads serving other points in the United States, Canada and Mexico.</p>
<p>The Reading Railroad System                  Local Office                  233 Broadway                  New York, New York 10007</p>	<p>Serves eastern Pennsylvania, New Jersey and Delaware. It has direct rail connections with the Baltimore &amp; Ohio, Central of New Jersey, Erie-Lackawanna, Lehigh Valley, Penn Central, and Western Maryland Railroads.</p>
<p>The Lehigh Valley Railroad Company                  General Office                  140 Cedar Street                  New York, New York 10006</p>	<p>Serves Buffalo and Niagara Falls through New Jersey, Pennsylvania and New York, connecting with railroads serving most of the United States, Canada and Mexico.</p>
<p>Penn Central Transportation Company                  Local Office, Freight Sales Department                  466 Lexington Avenue                  New York, New York 10017</p>	<p>Serves thirteen states, the District of Columbia and points in the Provinces of Ontario and Quebec. It has direct service to Port Newark and the Elizabeth-Port Authority Marine Terminal, New Jersey. Penn Central connects with other railroads serving the South, West and other points.</p>
<p>The New York, New Haven &amp; Hartford Division of the Penn Central Transportation Company                  General Freight Agent                  466 Lexington Avenue                  New York, New York 10017</p>	<p>Serves New England and connects with the railroads serving the Midwest and Eastern Canada.</p>

Brooklyn Eastern District Terminal General Office 86 Kent Avenue Brooklyn, New York 11211	Area Served: Brooklyn waterfront for transfer of freight with other railroads, and certain terminal locations, including movement of domestic freight and export and import freight with Canada and Mexico. Direct rail connections with the Baltimore & Ohio Railroad, Central Railroad of New Jersey, Erie-Lackawanna Railroad, Lehigh Valley Railroad, New York, New Haven & Hartford Railroad, and the Penn Central.
Bush Terminal Railroad Company General and Sales Offices 107 48th Street Brooklyn, New York 11232	Area Served: Brooklyn waterfront from 28th Street and Second Avenue to 58th Street and First Avenue, having direct rail connections with Bush Terminal Associates, and industrial sites. Daily connections with the Baltimore & Ohio Railroad, Central Railroad of New Jersey, Erie-Lackawanna Railroad, Lehigh Valley Railroad, New York, New Haven & Hartford Railroad and Penn Central.
East Jersey Railroad and Terminal Company General Office East 22nd Street Bayonne, New Jersey 07002	Area Served: Constable Hook, Bayonne, New Jersey for the movement of oil, shortening, tallow, grease and paper; connecting with the Lehigh Valley Railroad and Central Railroad of New Jersey.
Hoboken Shore Railroad General Office 1419 Bloomfield Street Hoboken, New Jersey 07030	Area Served: Direct transfer of freight between railroad cars and steamship lines in Hoboken upon prior arrangement with Agent, Lighterage free. Interchanging with all railroads via the Erie-Lackawanna Railroad at Weehawken and the Erie-Lackawanna Railroad carfloat bridge at 11th Street in Hoboken.
Long Island Rail Road General Office and Freight Department Jamaica Station Jamaica, New York 11435	Area Served: Long Island, New York.
New York Dock Railway General Office and Foreign Freight Department Joralemon and Furman Streets Brooklyn, New York 11201	Area Served: Brooklyn-Port Authority Piers, Brooklyn, New York and connecting with the Baltimore and Ohio Railroad, Central Railroad of New Jersey, Erie-Lackawanna Railroad, Lehigh Valley Railroad, New York, New Haven and Hartford Railroad, and the Penn Central.

Staten Island Rapid Transit  
Railway Company  
General Office  
Baltimore & Ohio Building  
2 North Charles Street  
Baltimore, Maryland 21201  
Local Office  
General Manager-Superintendent, Pier 6  
Staten Island, New York 10301

Area Served: Staten Island, New York connecting with the Central Railroad of New Jersey at Cranford Junction, New Jersey; Penn Central at Linden Junction, New Jersey; Lehigh Valley Railroad at Staten Island Junction, New Jersey with Erie-Lackawanna Railroad, Long Island Railroad, West Shore Railroad via carfloat from St. George, Staten Island.

The New York Susquehanna & Western  
Railroad Company  
General Office and Traffic Department  
Tri-Terminal Building  
309 River Road  
Edgewater, New Jersey 07020

Area Served: Northern New Jersey connecting with the Erie-Lackawanna Railroad, Penn Central, Lehigh & Hudson, River Railway, Wharton & Northern Railroad, Central Railroad of New Jersey, and Lehigh Valley Railroad.

The following table indicates the depth of long-haul rail freight service available to the industrialist in the Metropolitan Area.

Daily Scheduled Railroad Freight Service in the New York-Northeastern New Jersey Metropolitan Area

To Principal Cities (Outbound)

	Number of Trains	Average Time
Albany	3	6¾ hrs.
Allentown, Pa.	7	5½
Baltimore	3	8¾
Boston	3	11
Buffalo	4	16¼
Chicago	10	30
Cincinnati	1	25½
Detroit	1	23¾
East St. Louis	4	34¾
Harrisburg, Pa.	2	9
Huntington, Ind.	1	23
Indianapolis	1	31
New Haven, Conn.	2	3¼
Philadelphia	10	5¼
Pittsburgh	2	23
Scranton	3	11
South Bend, Ind.	1	26

From Principal Cities (Inbound)

	Number of Trains	Average Time
Albany	1	6¼ hrs.
Allentown, Pa.	6	4¾
Baltimore	4	9
Boston	2	10¼
Buffalo	7	20
Chicago	15	32
Detroit	1	30½
East St. Louis	2	33¼
Hammond, Ind.	1	32½
Harrisburg, Pa.	3	10
Huntington, Ind.	3	31¼
New Haven, Conn.	2	7¼
Philadelphia	9	5
Pittsburgh	1	23¼
Scranton	1	13¼
Syracuse	2	10

Source: Through Freight Schedules of the Seven Long-Haul Companies Serving the Metropolitan Area.

The availability of piggyback transportation can be valuable to those industries whose transport requirements do not make on-site rail access an absolute necessity. TOFC combines the cost benefits of rail with the flexibility of the highway. The convenience and reliability of piggyback freight haulage has contributed to its popularity among the Area's shippers, evidenced by its annual average growth of 10 per cent per year during the last decade.

Various types of TOFC service are provided by the railroads operating in the Area. These include hauling the trailers of shippers, of motor common carriers, of ocean carriers and of trailers supplied to the shipper by the railroad. Specifically, the service is available in seven different plans designed to accommodate the particular requirements of every shipper. The special yards, established to handle this kind of traffic, are listed in the accompanying table.

Plan I—Trailers owned by motor common carriers are hauled on railroad flatcars under a fixed charge per trailer based on weight and distance, regardless of commodity. The motor carrier takes the trailers to and from the railroad terminals before and after the rail movement. Railroads have no direct contracts with shippers under Plan I, since the over-the-road carrier solicits shippers and bills the freight at truck rates.

Plan II—Under this all-rail plan, the rail carrier deals directly with shippers, furnishes all equipment, and provides pickup and delivery between the shipper's plant and the rail terminal. Plan II is usually confined to communities within a relatively short radius of a major rail terminal. This plan is the only one which provides coast-to-coast rates.

Plan II $\frac{1}{4}$ —A variation of Plan II in which the railroad provides trailers, but only supplies terminal service at one end of the haul, either pickup or delivery, but not both.

Plan II $\frac{1}{2}$ —The shipper arranges to transport trailers between rail terminal and plant or warehouse. This plan permits the shipper to consolidate loads and permits more than one delivery at the destination.

Plan III—Trailers owned or leased by shippers are carried via rail at a flat charge per trailer or per rail car hauling two trailers. The shipper delivers his trailers to the rail terminal and also picks them up at termination of the rail haul. The railroad loads and unloads the trailers.

Plan IV—Under this plan, the shipper also takes his own or leased trailers to and from the rail terminal but, in addition, he loads and unloads his trailers on flatcars owned or leased to him. The railroads only perform the line-haul movement and assess shippers a fixed charge per car regardless of whether or not the cars are loaded.

Plan V—This is a joint operation between the railroads and motor carriers that extends the territory of both. Trailers may be owned by either the railroad or participating motor carrier. It permits each of the TOFC partners to handle shipments originating in or destined to the other's territory. Each may sell for the other.

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 Railroad Trailer-On-Flatcar Terminals Located in the Metropolitan Area
 

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Location or Facility	Operator
Elizabeth, N.J.	Baltimore & Ohio-Chesapeake & Ohio; Central Railroad of New Jersey
Jersey City, N.J.	Central Railroad of New Jersey; Erie-Lackawanna Railroad; Lehigh Valley Railroad
Kearny, N.J.	Penn Central Railroad
Kenvil, N.J.	Central Railroad of New Jersey
Newark, N.J.	Lehigh Valley Railroad
New York, N.Y.	Baltimore & Ohio-Chesapeake & Ohio; Penn Central Railroad
North Bergen, N.J.	Penn Central Railroad
Port Reading, N.J.	Reading Railroad System
Somerville, N.J.	Central Railroad of New Jersey
Weehauken, N.J.	Penn Central Railroad

Source: The Official Guide of the Railways, September, 1971.

Four hundred and twenty-one motor common carriers maintain terminals, call stations or offices in the Metropolitan Area and provide regular service to all points in North America. There are also 157 local cartage and express carriers operating here.

While all the major cities of the continent are served directly by common carriers from the Area, the reader will be especially interested in the extent of the Overnight Truck Delivery Zone (see map), within which motor common carriers promise next-morning delivery of goods. The extent of the Zone was determined by the Port Authority from contacts with members of the industry, and is in substantial agreement with the findings of an investigation by Dr. James Kenyon of the University of Georgia. The radius varies to some extent among motor carriers. Typically, their maximum overnight range averages almost 500 miles to principal cities and perhaps, 400 to 425 miles for smaller places located away from major freeway connections.

For the most part, domestic cargo—both inbound and outbound—is interchanged with local truckmen at one of many carrier-owned truck terminals. Two large Union Motor Truck Terminals are operated by The Port of New York Authority, one in lower Manhattan and the other in Newark, New Jersey.

Rates on *intrastate* traffic are not regulated in the State of New Jersey. In New York State, regulation is provided by the State Public Service Commission.

The Interstate Commerce Commission, which regulates *interstate* and international commerce, has established for each municipality throughout the Nation a commercial exempt zone, within which motor carrier traffic is free from Federal rate regulation. These zones have particular importance in the Metropolitan Area because of its bi-state nature and because of its importance as a gateway for the Nation's foreign trade.

The Metropolitan Area has numerous exempt zones, many of which overlap to a considerable degree. Generally, the extent of a commercial exempt zone can be determined by the following population-distance formula.

Population of Municipality	Mileage from Municipality Determining Exempt Zone
Less than 2,500	2 miles
2,500—24,999	3 miles
25,000—99,999	4 miles
100,000 and Over	5 miles

Two important exceptions to this rule are the zones for the Cities of New York and Newark. The New York City Commercial Exempt Zone is depicted in the accompanying map. As is apparent in the map, the extent of the Zone has been limited to a smaller area than the formula allows, but includes several major cargo-handling terminals and areas in New Jersey, such as the Ports of Newark and Elizabeth.

Newark's Commercial Exempt Zone differs from the standard specified by the population-distance formula in that its eastern portion extends only to the New York City boundary.



in addition to providing transportation and terminal facilities in the Port District, is also charged with the responsibility of protecting and promoting the commerce of the bi-state Area. To carry out this important function, the Port Authority has established a Port Commerce Division, whose staff is divided between its New York headquarters and nine trade development offices. The Division carries out an extensive program of assistance to shippers through specialized publications and by means of individualized assistance furnished, without charge, by the nine trade development offices. Among the services provided are information on routes, packing, mixed carload delivery, rates for water, rail and truck transportation, and customs inspection services.

Chicago  
Prudential Plaza  
Chicago, Illinois 60601

Cleveland  
Terminal Tower  
Cleveland, Ohio 44113

Eastern United States  
170 Broadway  
New York, New York 10038

Pittsburgh  
3 Gateway Center  
Pittsburgh, Pa. 15222

Washington  
1001 Connecticut Avenue, N.W.  
Washington, D. C. 20036

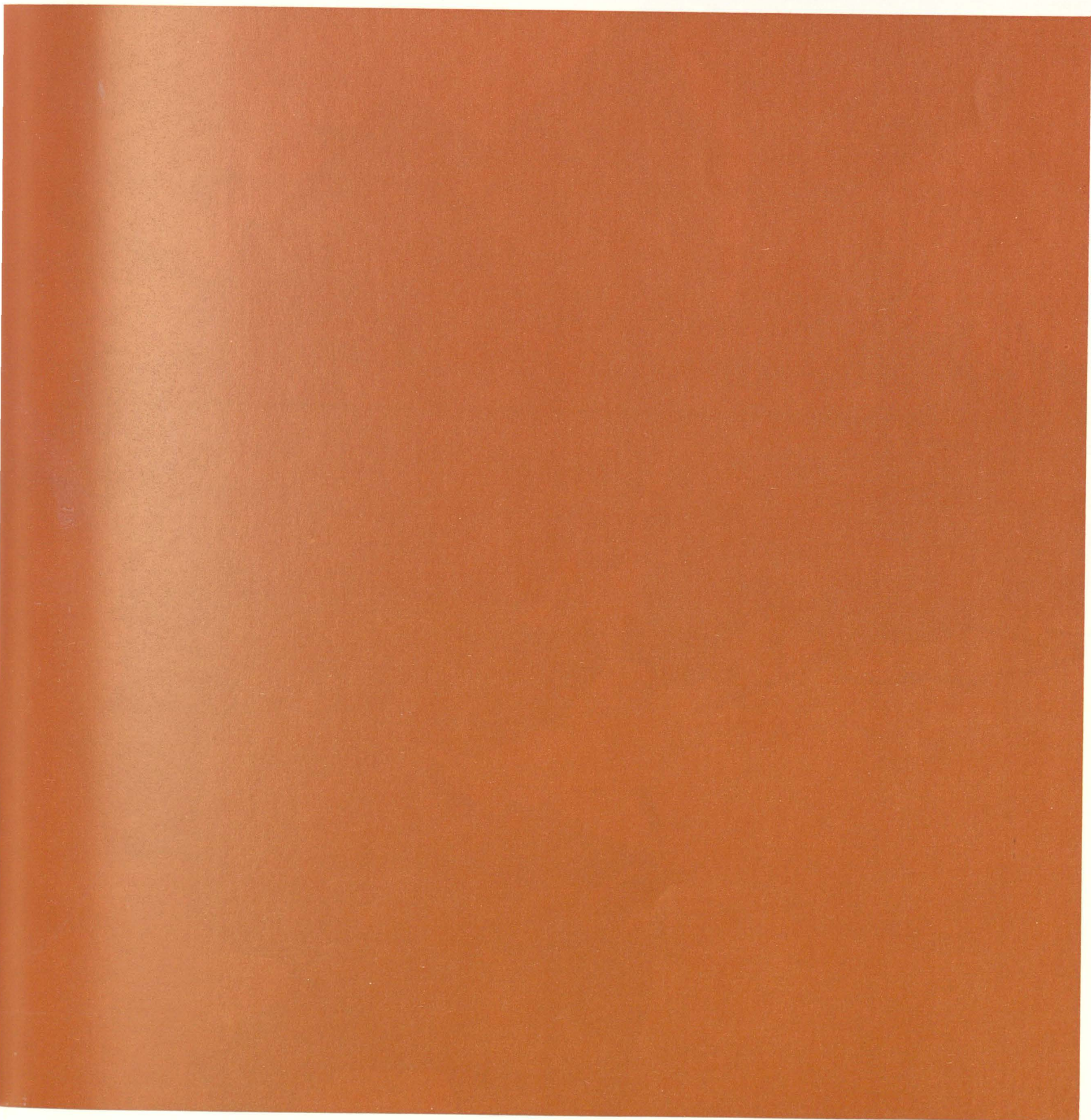
Latin America  
Eastern Airlines Building  
Santurce, San Juan,  
Puerto Rico 00911

Continental Europe  
Talstrasse 66  
8001 Zurich, Switzerland

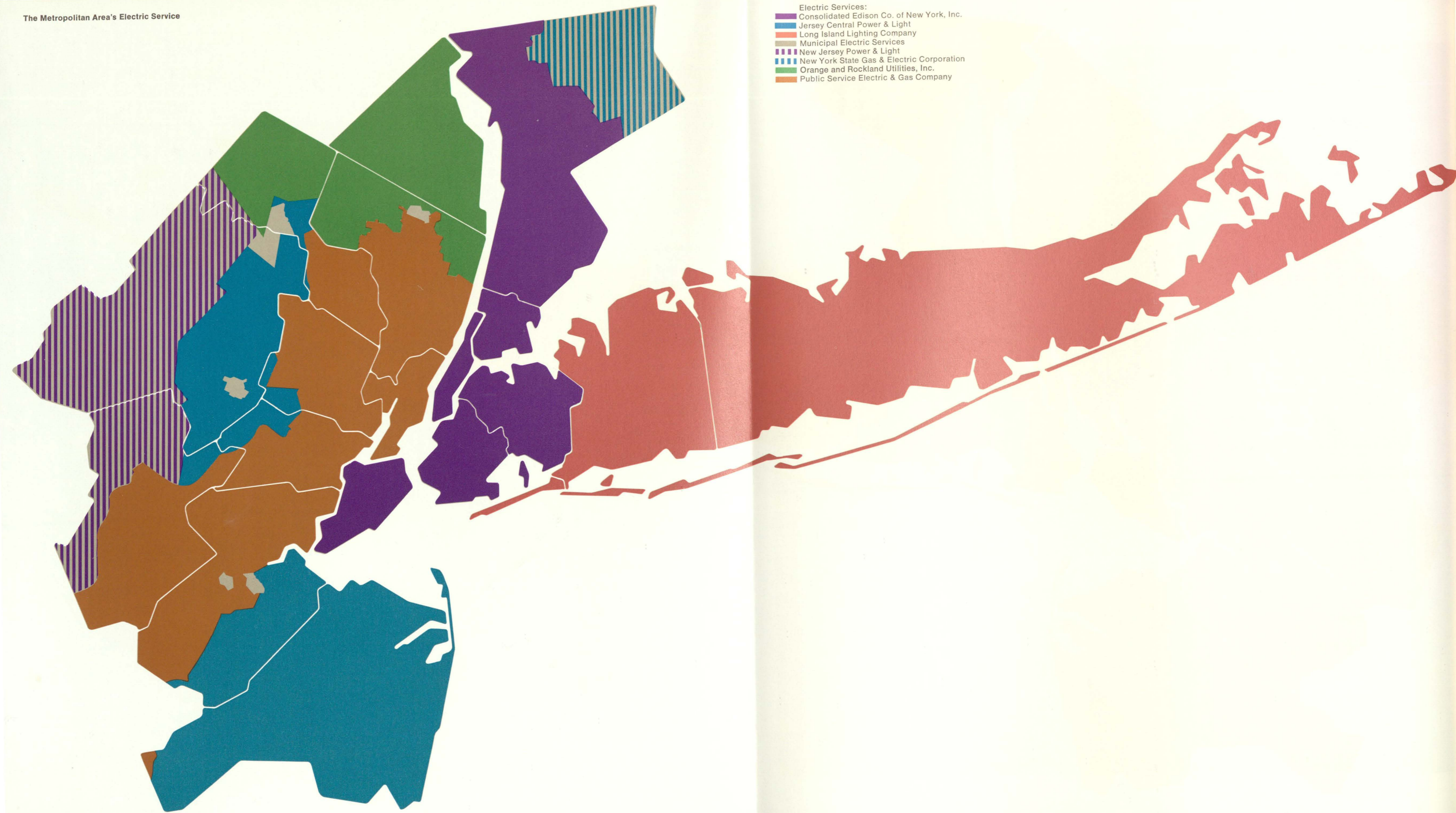
London  
130 Fenchurch Street  
London E.C. 3, England

Far East and Pacific Area  
Kokusai Building  
12, 3-Chome, Marunouchi  
Chiyoda-ku, Tokyo, Japan



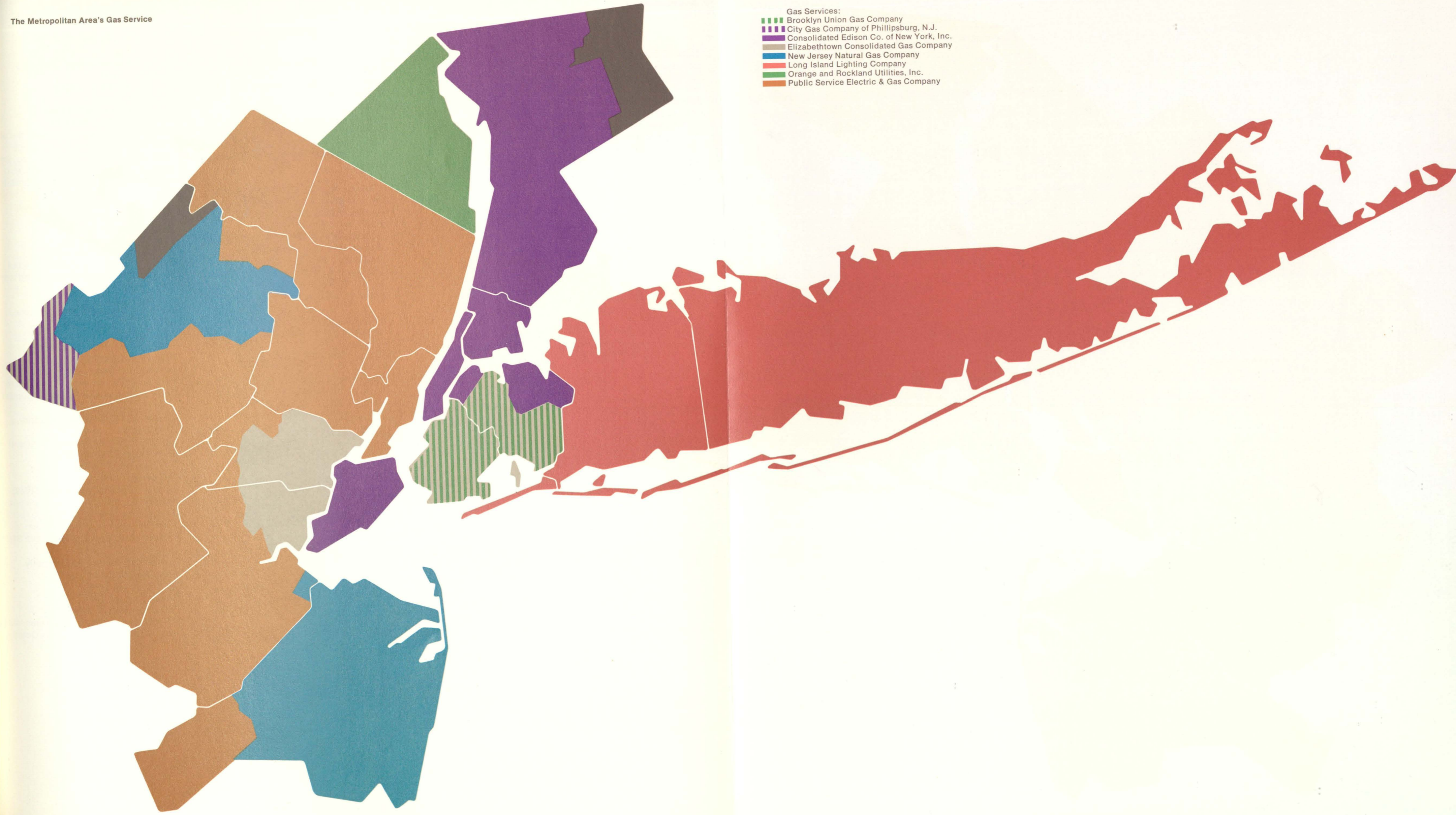


- Electric Services:
- Consolidated Edison Co. of New York, Inc.
  - Jersey Central Power & Light
  - Long Island Lighting Company
  - Municipal Electric Services
  - New Jersey Power & Light
  - New York State Gas & Electric Corporation
  - Orange and Rockland Utilities, Inc.
  - Public Service Electric & Gas Company



The Metropolitan Area's Gas Service

- Gas Services:
- Brooklyn Union Gas Company
  - City Gas Company of Phillipsburg, N.J.
  - Consolidated Edison Co. of New York, Inc.
  - Elizabethtown Consolidated Gas Company
  - New Jersey Natural Gas Company
  - Long Island Lighting Company
  - Orange and Rockland Utilities, Inc.
  - Public Service Electric & Gas Company



The bi-state Area's electric and gas requirements are supplied largely by eight investor-owned public utility companies. Four of these—Consolidated Edison of New York, Public Service Electric & Gas of New Jersey, Long Island Lighting, and Orange and Rockland Utilities—provide both gas and electric service. Two companies—Brooklyn Union Gas and New Jersey Natural Gas—provide gas service exclusively, while two—Jersey Central Power & Light and New York State Gas & Electric—only supply electricity. While the investor-owned utilities distribute the bulk of power and gas in the Area, there are also a number of municipally-owned and operated utilities.

The service areas of these utilities do not conform with county boundaries, nor are gas and electric service areas of a single utility always coterminous. To assist the industrialist, the accompanying maps are provided. The first depicts the electric service areas; the second, the gas service zones.



Each of the eight regional public utility companies maintains industrial or area development departments to which the industrialist can turn for essential information. These offices provide information on rates and charges applicable in each specific situation, and on sites, buildings and local economic conditions. They also maintain close liaison with other industrial development agencies.

1. Public Service Electric & Gas Company  
Area Development Office  
80 Park Place  
Newark, New Jersey 07101  
Telephone: (201) 622-7000  
Service: Gas and electricity to Hudson, Essex, Union, Middlesex, and parts of Morris, Passaic, Bergen, and Somerset Counties.

2. New Jersey Power & Light; Jersey Central Power & Light (subsidiaries of General Public Utilities Corporation)  
Area Development Office  
Madison Avenue at Punch Bowl Road  
Morristown, New Jersey 07960  
Telephone: (201) 539-6111  
Service: Electricity to portions of Passaic, Morris, Middlesex, Somerset, and all of Monmouth County.

3. New Jersey Natural Gas Company  
Industrial Sales Department  
601 Bangs Avenue  
Asbury Park, New Jersey 07712  
Telephone: (201) 774-2424  
Service: Gas to most of Monmouth County and parts of Morris County.

1. Consolidated Edison Company of New York, Inc.  
Area Development Office  
4 Irving Place  
New York, New York 10003  
Telephone: (212) 460-3200  
Service: Electricity to all boroughs of New York City and to part of Westchester County; gas to Manhattan, Bronx, parts of Queens, and part of Westchester; steam to parts of Manhattan.

2. Long Island Lighting Company  
Area Development Office  
250 Old Country Road  
Mineola, New York 11501  
Telephone: (516) 747-1000  
Service: Gas and electricity to all of Nassau and Suffolk Counties and a small part of Queens County.

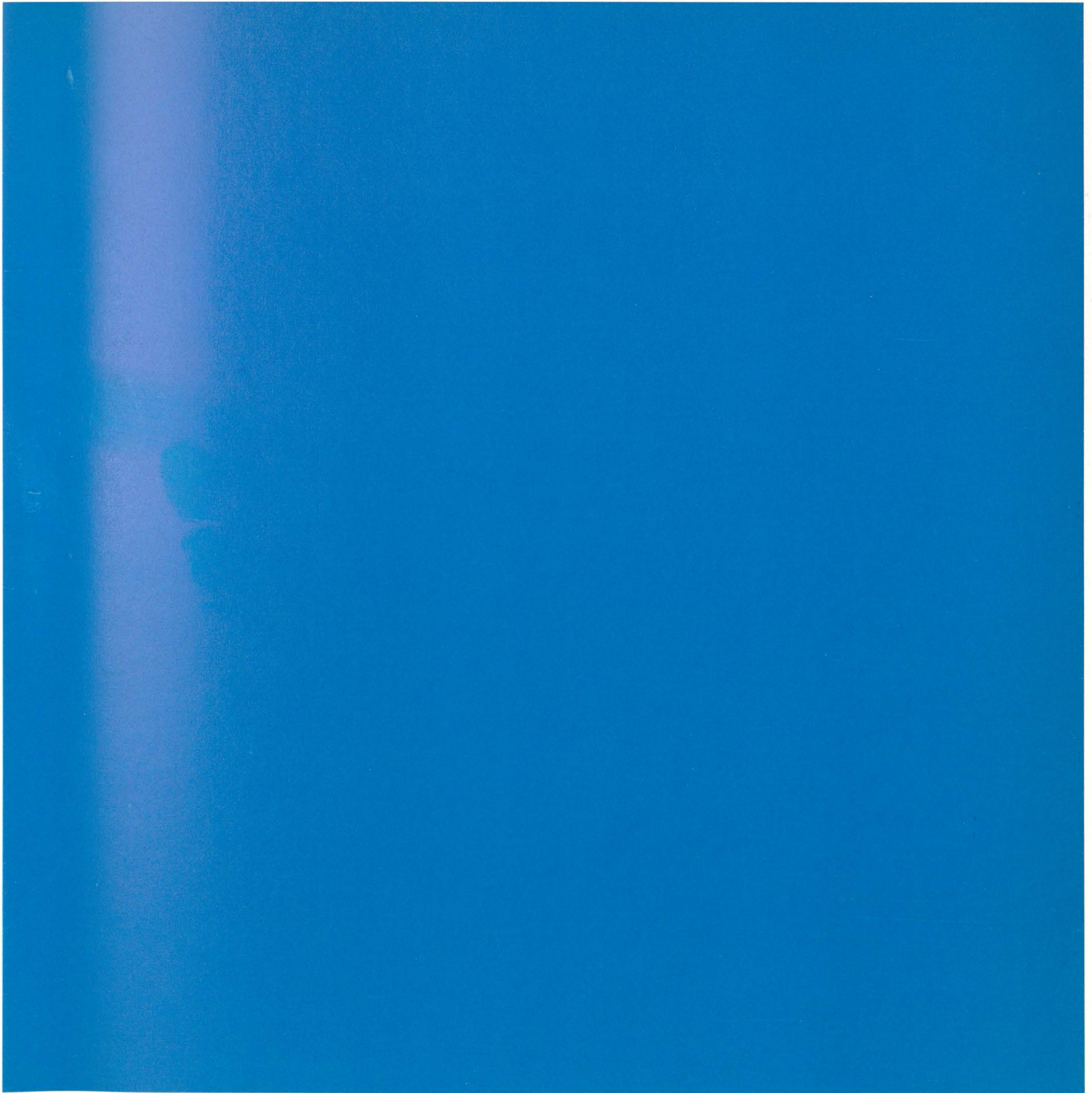
3. Orange & Rockland Utilities, Inc.  
Area Development Office  
75 Route 59  
Spring Valley, New York 10977  
Telephone: (914) 352-6000  
Service: Gas and electricity to all of Rockland County; electric service to parts of Bergen and Passaic Counties.

4. New York State Gas & Electric Corporation  
Industrial Development Department  
4500 Vestal Parkway East  
Binghamton, New York 13002  
Telephone: (607) 729-2551  
Service: Electricity to parts of Westchester County. The Company's operations in the Metropolitan Area represent a small portion of a large system in Western and Northern New York State.

5. Brooklyn Union Gas Company  
Area Development Office  
195 Montague Street  
Brooklyn, New York 11201  
Telephone: (212) 643-2000  
Service: Gas to Brooklyn, Staten Island and the major part of Queens County.







## The Water Resource

The water supply of the New York-North-eastern New Jersey Metropolitan Area is sufficient to meet requirements well into the next century.

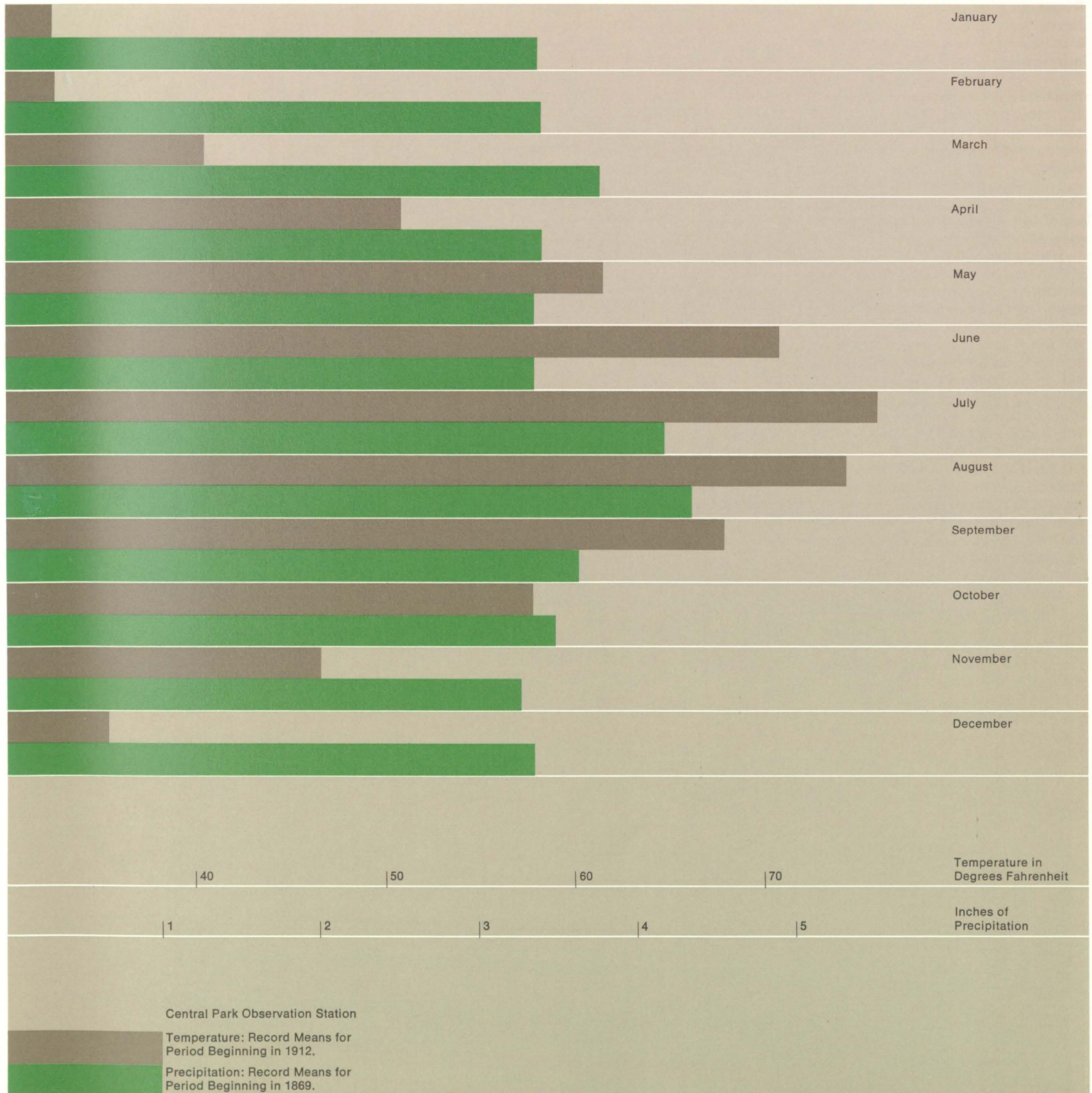
This favorable long-range outlook stems from the Metropolitan Area's location in a water-rich part of the North American continent, a humid region whose 42 inches of average annual precipitation, well distributed over the seasons, feed numerous streams, lakes and extensive aquifers. This overall appraisal of water supply was voiced in a comprehensive review of the adequacy of water resources in the component regions of the Nation prepared for the United States Senate by the Select Sub-Committee on Water Resources. In this review, the major factors affecting future water demand (such as population and industrial growth) and protection of stream flow, were taken into account in evaluating the adequacy of the water resource available to each of the Nation's regions.

The Area draws its water from a number of sources, some of which extend well beyond its borders. West of the Hudson, the major supplies of water for Rockland and the nine New Jersey counties are derived from the surface waters and basins of the Delaware, Passaic, Hackensack and Raritan Rivers, supplemented by intensive development of ground water resources. East of the Hudson, the New York City system (which also supplies large parts of Westchester County) reaches far into New York State to draw from the Hudson and Delaware Rivers, and from its extensive reservoir system in the Catskill Mountains. Ground water is the main source for most of Long Island, including parts of Queens County.

Although there is small likelihood of a shortage of water available to the Area, increased future demand may pose problems in terms of water distribution. The adequacy of the existing water delivery systems has been questioned in the past, and most experts agree that deficiencies experienced in the mid-1960's resulted from inadequacies in the distributive system rather than from a scarcity of water, per se.

Plans for the improvement of the Area's water distribution systems are described in the following pages. When completed, they will provide a large degree of assurance that the so-called drought of the mid-1960's will not reoccur.

Graph 45  
Climate in the Metropolitan Area  
Monthly Averages



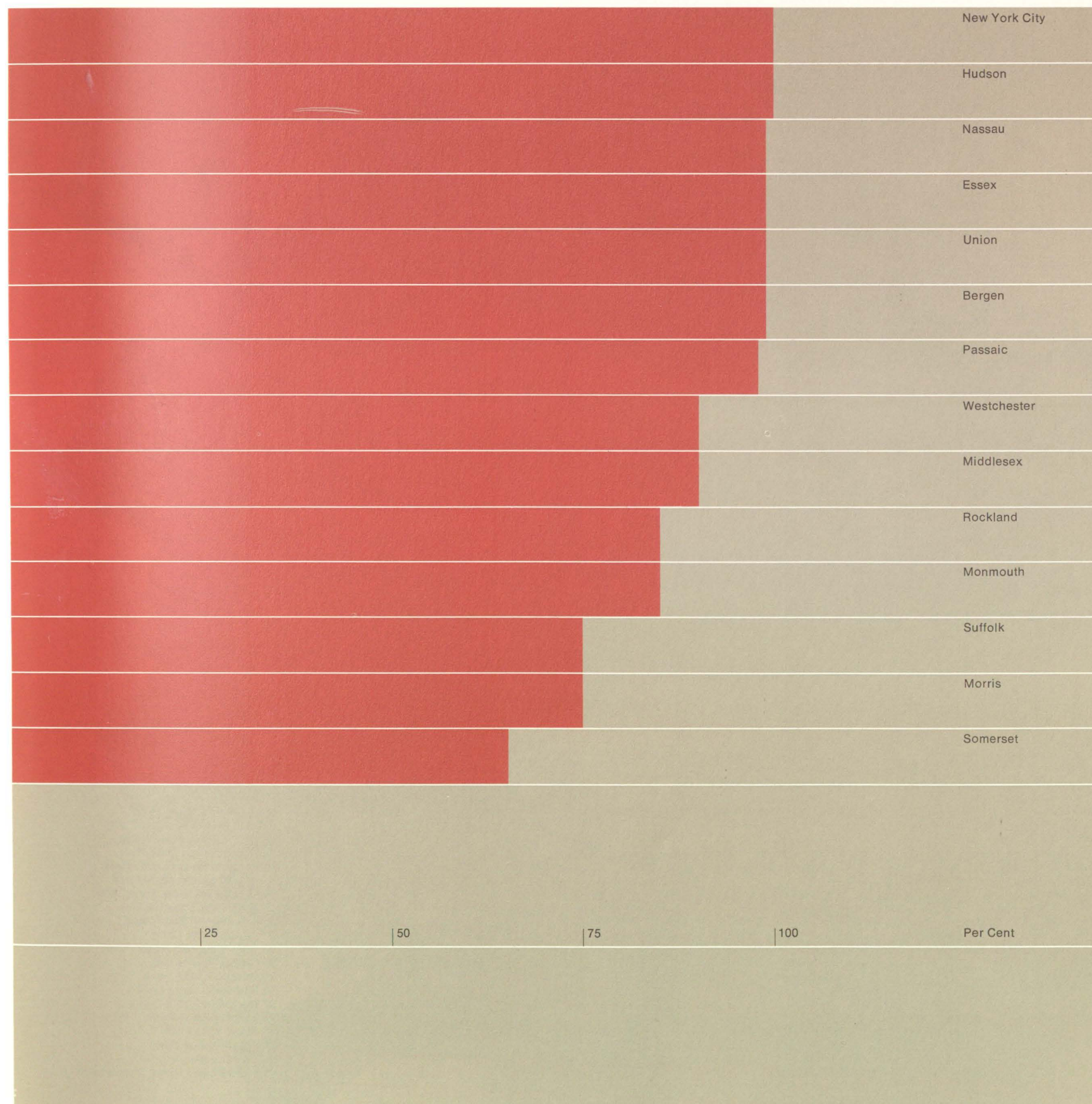
A total of 227 water delivery systems serve the eighteen counties of the Metropolitan Area. Reliance on individual wells is confined mainly to the Area's fringe counties. Thus, the northern halves of Passaic (New Jersey), Westchester (New York), Suffolk (New York), and the outlying portions of Union (New Jersey) and Monmouth (New Jersey) Counties are rather sparsely served by water systems. The accompanying map indicates the specific areas in which water delivery systems operate at the present time.

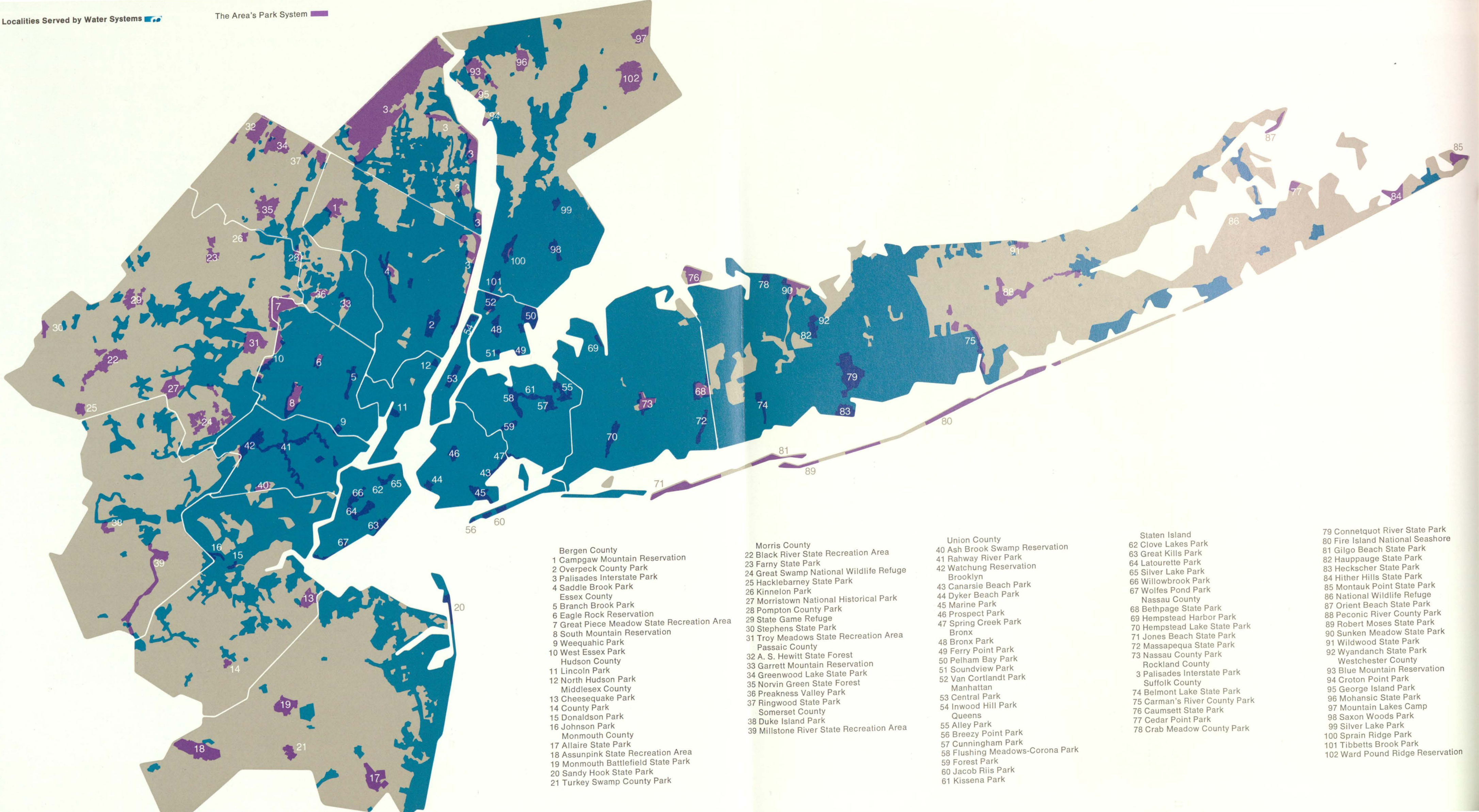
Most of the Area's water requirements are met by about a dozen large purveyors. By far the largest is the New York City system which is required, by law, to supply distributors in Westchester, Putnam and Orange Counties. Its deliveries amount to 1.1 billion gallons per day, including 60 per cent of Westchester's requirements. On Long Island, the largest suppliers are the Jamaica Water Supply Company and the Utilities and Industries Corporation, Woodhaven Division (Queens), the Suffolk County Water Authority (Suffolk), the Long Island Water Corporation, and the Utilities and Industries Corporation, Massapequa Division (Nassau).

The nine northeastern counties of New Jersey are primarily served by eight major Area-wide supply systems. These include the Commonwealth Water Company (Essex, Morris and Union), the Elizabethtown Water Company (Middlesex, Somerset and Union), the Hackensack Water Company (Bergen and Hudson), the Jersey City Department of Public Works (Hudson), the Middlesex Water Company (Middlesex), the Monmouth Consolidated Water Company (Monmouth), the Newark Water Authority (Essex), and the Passaic Valley Water Commission (Passaic). The North Jersey District Water Supply Commission sells water wholesale to the major supply systems. The other water supply agencies in the Area are quite small and derive their supplies from the larger utilities or from their own wells.

In New Jersey, the State Department of Environmental Protection oversees both the quantity and the quality of water supplies. In New York State, the Bureau of Public Water Supply regulates quantity, while the Department of Environmental Conservation monitors water quality.

Graph 46  
Proportion Of Population Served By Water  
Distributors





- Bergen County**  
 1 Campgaw Mountain Reservation  
 2 Overpeck County Park  
 3 Palisades Interstate Park  
 4 Saddle Brook Park  
**Essex County**  
 5 Branch Brook Park  
 6 Eagle Rock Reservation  
 7 Great Piece Meadow State Recreation Area  
 8 South Mountain Reservation  
 9 Weequahic Park  
**Hudson County**  
 10 West Essex Park  
**Hudson County**  
 11 Lincoln Park  
**Middlesex County**  
 12 North Hudson Park  
**Middlesex County**  
 13 Cheesequake Park  
 14 County Park  
 15 Donaldson Park  
 16 Johnson Park  
**Monmouth County**  
 17 Allaire State Park  
 18 Assunpink State Recreation Area  
 19 Monmouth Battlefield State Park  
 20 Sandy Hook State Park  
 21 Turkey Swamp County Park

- Morris County**  
 22 Black River State Recreation Area  
 23 Fanny State Park  
 24 Great Swamp National Wildlife Refuge  
 25 Hacklebarney State Park  
 26 Kinnelon Park  
 27 Morristown National Historical Park  
 28 Pompton County Park  
 29 State Game Refuge  
 30 Stephens State Park  
 31 Troy Meadows State Recreation Area  
**Passaic County**  
 32 A. S. Hewitt State Forest  
 33 Garrett Mountain Reservation  
 34 Greenwood Lake State Park  
 35 Norvin Green State Forest  
 36 Preakness Valley Park  
 37 Ringwood State Park  
**Somerset County**  
 38 Duke Island Park  
 39 Millstone River State Recreation Area

- Union County**  
 40 Ash Brook Swamp Reservation  
 41 Rahway River Park  
 42 Watchung Reservation  
**Brooklyn**  
 43 Canarsie Beach Park  
 44 Dyker Beach Park  
 45 Marine Park  
 46 Prospect Park  
 47 Spring Creek Park  
**Bronx**  
 48 Bronx Park  
 49 Ferry Point Park  
 50 Pelham Bay Park  
 51 Soundview Park  
 52 Van Cortlandt Park  
**Manhattan**  
 53 Central Park  
 54 Inwood Hill Park  
**Queens**  
 55 Alley Park  
 56 Breezy Point Park  
 57 Cunningham Park  
 58 Flushing Meadows-Corona Park  
 59 Forest Park  
 60 Jacob Riis Park  
 61 Kissena Park

- Staten Island**  
 62 Clove Lakes Park  
 63 Great Kills Park  
 64 Latourette Park  
 65 Silver Lake Park  
 66 Willowbrook Park  
 67 Wolfes Pond Park  
**Nassau County**  
 68 Bethpage State Park  
 69 Hempstead Harbor Park  
 70 Hempstead Lake State Park  
 71 Jones Beach State Park  
 72 Massapequa State Park  
 73 Nassau County Park  
**Rockland County**  
 3 Palisades Interstate Park  
**Suffolk County**  
 74 Belmont Lake State Park  
 75 Carman's River County Park  
 76 Caumsett State Park  
 77 Cedar Point Park  
 78 Car Meadow County Park

- 79 Connetquot River State Park  
 80 Fire Island National Seashore  
 81 Gilgo Beach State Park  
 82 Hauppauge State Park  
 83 Heckscher State Park  
 84 Hither Hills State Park  
 85 Montauk Point State Park  
 86 National Wildlife Refuge  
 87 Orient Beach State Park  
 88 Peconic River County Park  
 89 Robert Moses State Park  
 90 Sunken Meadow State Park  
 91 Wildwood State Park  
 92 Wyandanch State Park  
**Westchester County**  
 93 Blue Mountain Reservation  
 94 Croton Point Park  
 95 George Island Park  
 96 Mohansic State Park  
 97 Mountain Lakes Camp  
 98 Saxon Woods Park  
 99 Silver Lake Park  
 100 Sprain Ridge Park  
 101 Tibbetts Brook Park  
 102 Ward Pound Ridge Reservation



Current deliveries of water to users are estimated by the Tri-State Regional Planning Commission to amount to 2.0 billion gallons per day, or an average of 140 gallons per capita per day. Of this volume, about 10 per cent is consumed by manufacturing industries. This is in contrast to the national norm in which manufacturing absorbs between a quarter and a third of total supplies. Here, on the other hand, a sizable portion of the Area's industrial requirements is drawn from private sources, either fresh or brackish surface water or wells. In New Jersey, the State Division of Water Policy and Supply estimates that self-supplied industrial water amounts to 345 million gallons per day in the Northern New Jersey counties. It should be pointed out that much of this self-supplied water—particularly in Union, Essex, Middlesex and Hudson Counties—is brackish.

Chemical analyses of the water supplied by each distribution agency are performed and tabulated by the following public agencies:

#### New Jersey

Division of Environmental Quality  
Department of Environmental Protection  
Trenton, New Jersey 08625

#### New York

Division of Water Resources  
New York State Department of  
Environmental Conservation  
50 Wolf Road  
Albany, New York 12201

New York City Department of  
Water Resources  
Environmental Protection Administration  
Municipal Building  
New York, New York 10007

On a minimum safe-yield basis, which assumes repetition of droughts in the historical weather cycle, the reliable output of the water sources for the Metropolitan Area is estimated at 2.6 billion gallons per day. Since daily consumption presently amounts to 2.2 billion gallons, the Area has a current daily surplus of 0.4 billion gallons. By 1985, however, daily consumption is expected to increase to 3.1 billion gallons, due in part to population growth (of about 3.6 million) and increasing per capita usage as well as to industrial expansion. This combination of factors means that by 1985 the Area's utilities must provide additional water estimated at 500 million gallons more per day. The various water resource agencies have proposed several large-scale projects that, taken together, are deemed capable of meeting the Area's needs through the year 2000. Some of these projects are scheduled for completion in the 1970's; others in the 1990's.

#### New York City, Westchester, Nassau

The largest proposed project in the Region entails tapping the Hudson River at Hyde Park in Dutchess County and constructing an aqueduct southward to the Kensico Reservoir. This water would serve New York City's added needs and would also supplement local sources in Dutchess, Putnam, Westchester and Nassau Counties. It also has the potential to serve adjacent areas in Northeastern New Jersey, Southwestern Connecticut and other New York counties.

#### Suffolk County

The water resource under Suffolk is deemed sufficient to meet the local needs until around the year 2000. After that, the County's water supply will draw upon recycled water, importation from outside, or through the desalination of sea water.

#### Rockland County

Rockland County should be able to expand its local ground and surface sources by about fifty per cent. By 1985, the local resource will require supplemental support from the New York City supply. Such support is estimated at one-third of the projected demand.

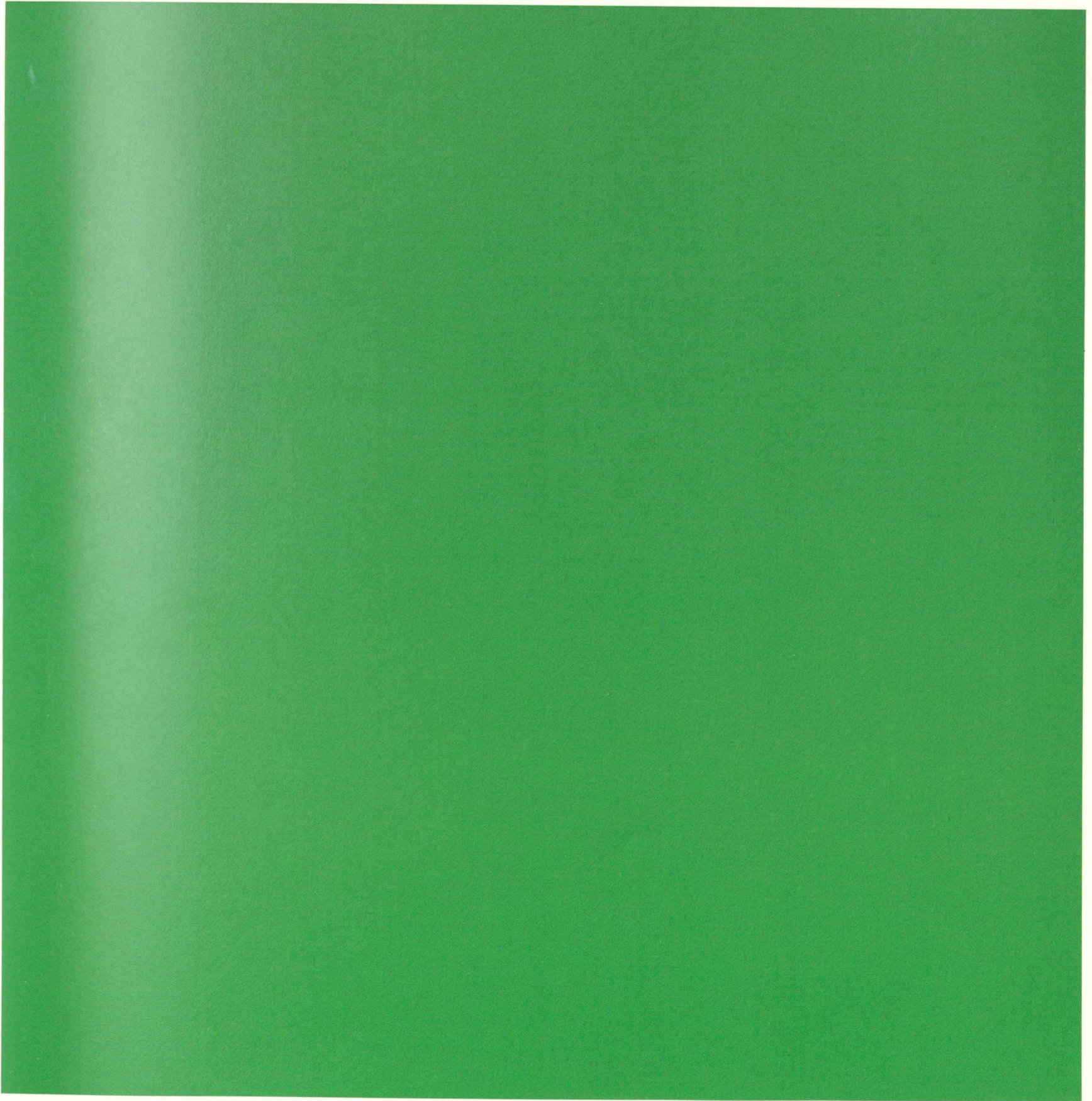
#### New Jersey (Except Monmouth County)

New Jersey's northeastern counties now rely heavily on the Passaic and Hackensack River basins. Some increase in supply is available from the Passaic, but virtually none from the Hackensack. The major project for meeting future needs of this part of New Jersey is based upon development of the now under-utilized potential of the Raritan basin, and of the mid-section of the Delaware River. These additional sources will allow transfer of water to the northeastern counties. Utilization of Delaware River water in large volume will depend upon completion of the Tocks Island development.

#### Monmouth County

Recently completed and currently planned reservoir facilities will furnish much of the future needs of the urbanized sections of this County.





## Research and Development

The manpower employed in research and related activities within the New York-Northeastern New Jersey Metropolitan Area represents a rich pool of advanced skills which industry may tap. Three broad types of establishments may be identified in this extensive industrial research and development complex. The first and most important as a supporting service to industry is the large group of independent laboratories whose services are for hire. A second group is composed of laboratories in educational institutions which accept projects from outside sources on a fee basis. The third group is made up of laboratories that are adjuncts to the manufacturing operations of large firms.

This complex is augmented by specialized consulting services whose sum total of expertise covers many fields; also relevant are the various computer services, including specialists in computer applications. Trade, scientific and technical associations of which New York City is the leading center, add to the range of information to which the industrialist has access.

## Laboratories

Industrial research and testing is conducted by about 1,500 laboratories, employing 21,000 engineers and scientists, 14,000 technicians and 14,000 non-technical support personnel. These laboratories engage in a wide range of research, from color testing to theoretical research on sub-atomic particles. The 21,000 engineers and scientists employed in laboratories in the Metropolitan Area represent 19 per cent of the Area's total scientific and engineering work force of 112,000 (see "The Labor Supply").

In addition to this substantial resource available within the Area, the industrialist also has ready access to a substantial number of laboratory and technical service establishments located on the periphery of the Metropolitan Area in the States of New York, New Jersey and Connecticut, as well as in the reaches of the urban belt extending from the Boston Area to Washington, D. C.

Within the Area, industrial laboratories have tended to cluster in the industrial centers and to some extent around the major educational institutions. While the major concentrations of the Area's 1,500 testing and research facilities are found in the central business and industrial districts (see map), laboratories maintained by industries have tended to locate in recent years in suburban settings available throughout the outlying counties of the Metropolitan Area.

Detailed directories of research and development establishments are compiled periodically by the States of New Jersey and New York. These publications, in addition to identifying research and development establishments alphabetically and geographically, also provide convenient reference to a given organization's sphere of specialization.

For the State of New Jersey, "Industrial Research Laboratories in New Jersey," prepared by the State Division of Economic Development, may be obtained directly from the Division (see "Agencies Serving the Industrial Prospect").

For New York State, the "Directory of Industrial Research Laboratories," prepared by the State Department of Commerce, may be obtained directly from the Department in Albany or from the New York City Office (see "Agencies Serving the Industrial Prospect").





The bi-state Area is the headquarters of more than 4,000 professional, scientific and trade associations, with a particularly heavy concentration in New York City. Five of the eight largest professional societies of engineers and scientists in the Nation maintain their headquarters in New York City: the American Institute of Mining, Metallurgical and Petroleum Engineers; the American Society of Mechanical Engineers; the Institute of Electric and Electronic Engineers; the Society of Automotive Engineers; and the American Society of Civil Engineers. Many smaller societies also make their home in New York's United Engineering Center, where the headquarters of twenty-one engineering societies are located.

The meetings of professional and scientific societies provide a valuable labor exchange as well as broad opportunities for communication and expression among their members. These outlets of scientific information enable scientists, engineers and other professional personnel to keep abreast of the latest advances in their fields.

New York City is frequently the site chosen by the scientific-technical community for annual conventions and meetings. These valuable "congresses" facilitate the exchange of ideas between distinguished members of the professional world.

According to the International Data Processing Corporation, publishers of *Datamation Magazine*, the Metropolitan Area contained approximately 5,600 computers in 1969, more than twice Chicago's 2,700 or Philadelphia's 2,300 computer systems. This vast electronic data processing establishment is attended by numerous programmers, systems analysts, operators and keypunch clerks.

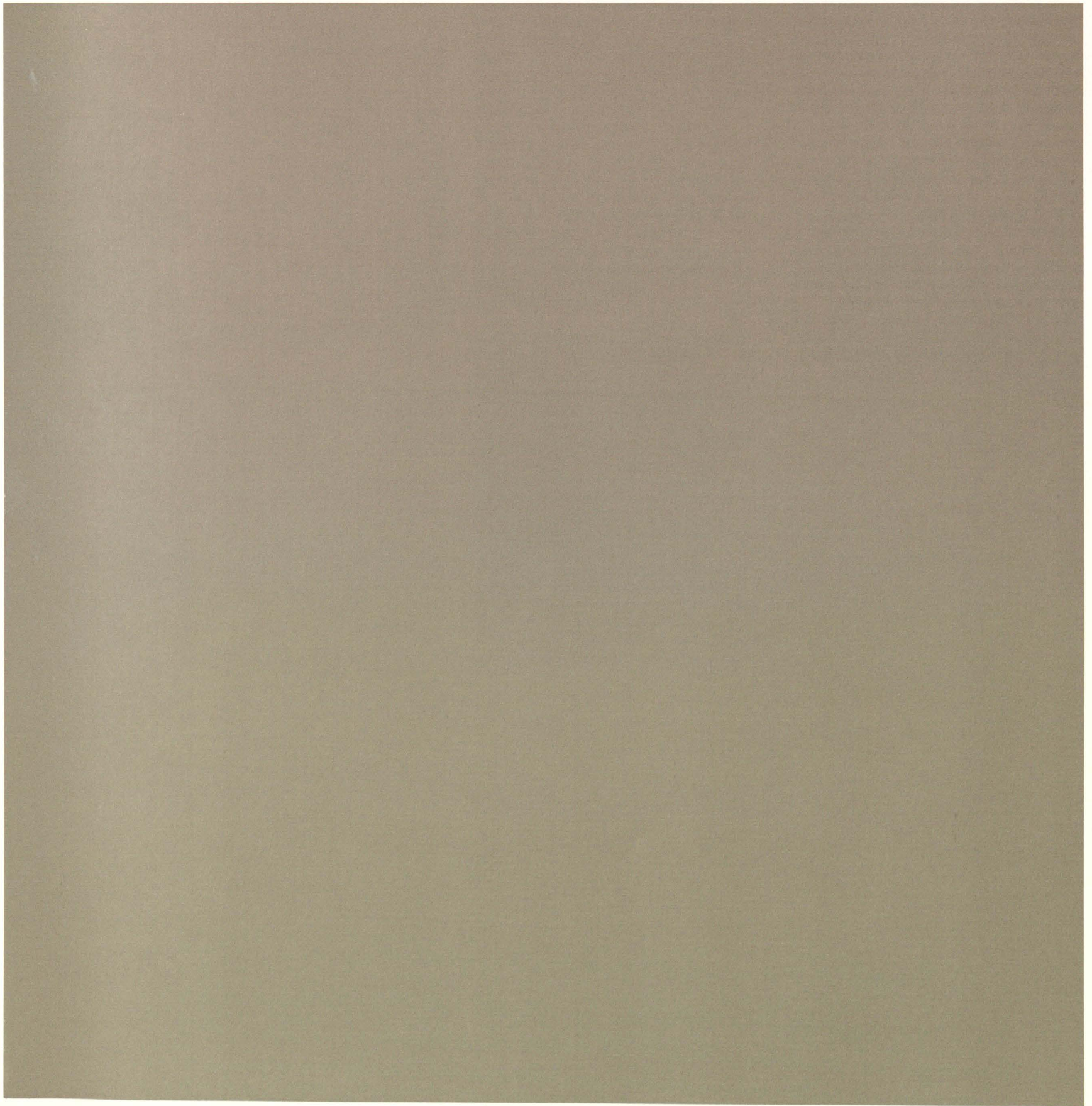
In the computer field, the 1967 Census of Selected Services reports that 332 firms are engaged in the business of furnishing statistical and computer services for others on a contract or fee basis. These include such activities as programming, leasing of computer time, processing services, and related services. In 1967, these firms employed about 8,600 persons and had total receipts of about \$136 million. The Metropolitan Area offers a greater choice of this type of supporting service than any other city. In Los Angeles, which ranks second to the bi-state Area in the field of commercial computer services, 163 firms specialize in the field.

Recognizing the important role of research and its increasing contribution to industrial progress, the States of New Jersey and New York have taken positive steps to provide an environment in which research can thrive. For example, both States have favorable tax policies concerning research and development expenditures. State aid to education in the respective States is expanding and efforts to broaden educational opportunities are progressing.

To achieve a wider diffusion and a more effective application of science and technology to industrial problems, both States have active programs under the State Technical Services Act passed by Congress in 1965. The purpose of this law is to provide a program of incentives and support for the several states in establishing and maintaining technical service programs that will benefit business and industry.

In 1960, Governor Nelson A. Rockefeller announced the establishment of the New York State Advisory Council for the Advancement of Industrial Research and Development. In the past decade, this group of prominent scientists and businessmen has been responsible for many advances in scientific and educational research in this Area. In New Jersey, the Council for Research and Development was founded in 1961 as an organization of business, industry, labor, education and government to promote the State's growth in research and development.





## Supporting Services

The manufacturer located in the Metropolitan Area has at his beck and call a wide range of highly developed special services. In some instances, these services supplement the in-house capabilities of the manufacturer. In other cases, they provide information and advice of the highest value when situations arise requiring expert, timely guidance. Whether the need be designing a product, testing market acceptability, developing sales promotions, ascertaining entry into distant markets, devising methods of distribution, or seeking short- and long-term funding, professional advice is available to deal with such problems. Indeed, in the Metropolitan Area, and especially in the Manhattan Business District, the unusual and the off-beat situations can be met with the highest obtainable degree of expertise.

Wholesale Trade

Wholesale Trade in the Metropolitan Area, 1967

	Number of Establishments	Sales (\$ Millions)
Wholesalers	38,340	82,086
Kind of Business		
Motor Vehicles & Automotive Equipment	1,996	5,654
Drugs, Chemicals & Allied Products	1,917	5,666
Dry Goods & Apparel	5,945	13,587
Groceries & Related Products	4,890	11,877
Electrical Goods	2,150	4,529
Hardware, Plumbing & Heating Equipment	1,805	1,339
Machinery, Equipment & Supplies	5,338	5,714
Farm Product Raw Materials	466	3,173
Metals and Minerals	1,069	7,051
Petroleum and Products	540	3,224
Paper and Products	1,732	3,306
Lumber & Construction Materials	1,232	1,403
Miscellaneous Wholesalers	9,260	15,551

Today there are 38,340 wholesale establishments in the eighteen counties of the Metropolitan Area. Of these, 31,269 are merchant wholesalers engaged in the buying and selling of merchandise on their own account. They include industrial distributors, jobbers, exporters and importers. The other 7,071 establishments are composed of manufacturers' sales branches and of agents and brokers. The branches are maintained by manufacturing or mining companies apart from their plants for the marketing of their products at wholesale; agents and brokers are independent operators engaged in buying and selling goods on a commission basis.

In 1967, wholesalers' receipts totalled \$82 billion. Merchant wholesalers accounted for \$39 billion, 48 per cent of the total, while manufacturers' sales branches accounted for an estimated 34 per cent or \$28 billion. The Area's wholesale trade complex represented 12 per cent of the Nation's establishments and accounted for 18 per cent of the value of its transactions—the largest single concentration of commercial activities and services available on the continent. Wholesale trade in the Metropolitan Area performs functions beyond the needs of the Area itself. It is estimated that between a third and a half of the Area's wholesale transactions are generated with markets beyond the confines of the Metropolitan Area.

The tapping of distant markets is illustrated by the fact that export sales of merchant wholesalers in the Area account for a much larger proportion of their total sales volume (17 per cent) than for the same group nationally (5.9 per cent) or in other principal cities (Chicago, 1.8 per cent).

In addition to providing effective distribution in widespread markets, the Area's wholesale complex acts as an important assembler of industrial equipment, materials and supplies from all sources, domestic and foreign. The following table describes wholesaling in this Area by kind of business.

Wholesaling Establishments in the  
Metropolitan Area, 1967

	Area Total	Manhattan	Bronx	Brooklyn	Queens	Richmond	Nassau	Suffolk	Westchester	Rockland	Bergen	Essex	Hudson	Middlesex	Monmouth	Morris	Passaic	Somerset	Union
Total Wholesale Establishments	38,340	17,837	1,419	3,302	2,413	140	2,685	974	1,451	192	1,723	1,951	987	510	367	298	862	159	1,070
<i>Kind of Business</i>																			
Motor Vehicles & Automotive Equipment	1,996	258	105	209	227	17	207	124	121	29	144	152	73	74	39	36	75	19	87
Drugs, Chemicals & Allied Products	1,917	744	57	168	126	7	175	22	90	9	123	104	70	29	10	14	79	9	81
Dry Goods & Apparel	5,945	5,139	41	179	93	—	121	17	42	8	79	60	57	4	6	8	68	2	21
Groceries & Related Products	4,890	1,300	536	772	405	26	401	200	201	21	197	283	165	60	66	23	112	16	106
Electrical Goods	2,150	707	57	145	179	5	298	69	120	11	137	141	51	32	26	26	56	12	78
Hardware, Plumbing & Heating Equipment	1,805	476	93	204	184	11	171	79	94	16	79	131	60	28	28	20	50	11	70
Machinery, Equipment & Supplies	5,338	1,864	139	425	403	17	445	142	258	31	409	431	137	99	53	62	133	23	267
Farm Products	466	402	2	16	2	—	8	3	3	—	5	10	2	1	2	—	2	5	3
Metals & Minerals	1,069	463	24	90	86	2	61	16	33	2	60	56	45	26	6	17	20	2	60
Petroleum & Products	540	73	23	45	24	10	62	46	50	6	29	40	23	26	17	16	18	6	26
Paper & Products	1,732	876	61	159	91	5	116	23	58	11	80	79	50	13	13	10	49	5	33
Lumber & Construction Materials	1,232	243	51	110	98	7	140	82	73	11	92	85	42	37	28	14	42	18	59
Miscellaneous Wholesalers	9,260	5,292	230	780	495	33	480	151	308	37	289	379	212	81	73	52	158	31	179

The New York-Northeastern New Jersey Metropolitan Area contains the Nation's largest concentration of public warehousing facilities. According to the 1967 U. S. Census of Business, its 250 public warehousing establishments contain 22,891,000 square feet of occupiable floor space for handling general goods in dry storage. Of these 250 establishments, 68 are classified as bonded warehouses. During the 1958-1967 period, occupiable space increased by 30 per cent and the number of establishments increased by 23 per cent, demonstrating the viability of the Metropolitan Area's public warehousing business.

The Area's public warehousing facilities are, by all odds, the Nation's major concentration of storage space in public service. The closest competitor is Chicago which has about forty per cent of the Area's warehousing capacity, followed by Philadelphia with about twenty-five per cent. While New York's public warehousing has scored impressive gains, the advances made elsewhere have been of a modest order. During 1958-1967, Chicago's capacity increased by 16 per cent; Philadelphia's dropped 30 per cent. The increase of 30 per cent in the New York Area's capacity indicates that the Area's public warehousing sector is economically healthy.

New York's strong position in public warehousing has been accompanied by a corresponding development in private warehousing. According to the U. S. Bureau of the Census, private warehousing in the service of manufacturers and of merchant wholesalers amounted to about 130 million square feet of net storage space in 1963, the latest year for which firm data are available. About 110 million square feet of this space were in the service of merchant wholesalers. Current reports indicate that private warehousing is being augmented at a very rapid pace. In contrast, the Chicago Area had less than 62 million square feet in the service of manufacturers' sales branches and merchant wholesalers. After Chicago, the figures drop off very rapidly for other major trade centers.

Private warehousing has undergone rapid modernization in the Metropolitan Area. In 1954, 55 per cent of such space was located in multi-story structures. Since then, the trend towards single-story warehousing to achieve maximum economy in goods handling has resulted in a massive shift out of multi-story into single-story distribution centers. At the end of 1963, the proportion of single-story space had risen to 55 per cent. The resultant shift in capacity, as measured by goods through-put, probably was on the order of 60 per cent.

Modernization of private warehousing has continued at a high level since 1963. The F. W. Dodge Division of the McGraw-Hill Information Systems Company reported contract awards of \$113 million for 11.6 million square feet of warehouse space in the Metropolitan Area in 1970 alone. This high level of investment in warehousing plant assures the industrialist of continued adequacy in the services of supply and distribution available to him in the Metropolitan Area.

In the Metropolitan Area there are 27,192 establishments engaged in providing a variety of specialized business services, 13 per cent of the Nation's total. In 1967, this group reported receipts in excess of \$6.5 billion, 29 per cent of the Nation's aggregate. These exceeded the receipts of specialized business service establishments in Chicago, Los Angeles, Detroit, San Francisco, Washington, D.C., and Philadelphia combined.

The average size of a business service establishment appears to be larger here than it is in the Nation. In the Area, average receipts were \$240,000 per establishment, compared with the national average of \$107,000.

The group's composition is shown in the accompanying table. Most of the terms are self-explanatory, the principal exception being the consulting services group. This consists of such specialists as market researchers, business analysts, efficiency experts, sales engineers and tax consultants. Also included are establishments engaged in systems engineering and analysis, operations research, industrial and personnel management, and environmental engineering.

## Business Services in the Metropolitan Area, 1967\*

Miscellaneous Business Services	Area Total	Number of Establishments with Payrolls																	
		Manhattan	Bronx	Brooklyn	Queens	Richmond	Nassau	Suffolk	Westchester	Rockland	Bergen	Essex	Hudson	Middlesex	Monmouth	Morris	Passaic	Somerset	Union
<i>Advertising</i>	1,471	1,061	10	36	33	n.a.	87	18	32	3	34	76	8	6	10	13	15	2	27
Advertising Agencies	1,130	840	6	19	16	n.a.	63	13	18	2	28	67	3	6	5	9	13	2	20
Outdoor Advertising Services	61	20	—	6	4	n.a.	7	2	5	—	2	3	1	—	4	2	1	n.a.	4
Radio, TV & Publishers Representatives	153	138	—	2	5	n.a.	1	—	2	1	2	1	—	—	—	—	—	n.a.	1
Miscellaneous Advertising	127	63	4	9	8	n.a.	16	3	7	—	2	5	4	—	1	2	1	n.a.	2
<i>Business &amp; Consulting Services</i>	3,120	2,132	24	55	52	7	204	42	144	17	134	117	21	29	21	22	23	27	49
Business & Management Consultants	1,938	1,335	14	22	35	n.a.	123	32	107	12	85	67	16	21	11	13	11	n.a.	34
Statistical & Computer Services	330	191	4	5	4	n.a.	29	3	15	1	28	21	4	5	3	4	6	n.a.	7
Public Relations Specialists	480	402	—	4	3	n.a.	19	4	10	3	11	12	—	—	2	4	3	n.a.	3
Interior Decorators	338	204	6	24	10	n.a.	33	3	12	1	10	17	1	3	5	1	3	n.a.	5
<i>Duplicating, Mail &amp; Steno Services</i>	1,005	558	11	50	52	n.a.	108	22	43	4	26	38	22	7	12	16	16	n.a.	20
Direct Mail Advertising Services	510	260	3	34	26	n.a.	68	14	25	2	18	10	16	1	8	9	7	n.a.	9
Blueprinting & Photocopy Services	211	140	5	4	9	n.a.	16	3	8	1	3	7	2	4	1	1	3	n.a.	4
Stenographic & Duplicating Services	284	158	3	12	17	n.a.	24	5	10	1	5	21	4	2	3	6	6	n.a.	7
<i>Building Services</i>	1,494	317	60	107	142	n.a.	195	91	82	20	91	111	43	38	44	24	50	7	72
Window Cleaning	321	80	21	30	36	n.a.	29	11	18	2	12	21	12	7	7	4	15	n.a.	16
Exterminating	263	49	13	35	31	n.a.	32	19	14	2	8	23	14	3	4	2	7	n.a.	7
Other	910	188	26	42	75	n.a.	134	61	50	16	71	67	17	28	33	18	28	7	49
<i>Other Services</i>	7,965	3,753	135	334	362	40	665	304	372	72	394	497	143	147	122	120	207	31	267
Accounting, Auditing & Bookkeeping	3,020	1,689	38	119	121	23	226	84	101	24	114	152	54	33	37	32	89	4	80
Commercial Research & Development Laboratories	191	61	2	11	8	n.a.	24	7	11	2	16	14	—	3	3	8	7	n.a.	14
Commercial Testing Laboratories	107	34	1	6	6	n.a.	13	4	4	—	8	12	—	4	—	2	5	n.a.	8
Credit Bureaus	344	147	2	12	13	n.a.	41	13	17	5	16	28	9	11	5	5	6	n.a.	14
Engineering & Architectural Services	1,926	766	18	60	78	13	171	93	121	27	125	134	33	52	48	41	46	21	79
Equipment Rental & Leasing Services	521	110	34	31	47	4	64	36	39	5	34	21	2	14	14	12	19	6	29
Nonprofit Educational & Scientific Research Agencies	124	82	—	6	1	—	2	7	5	1	5	9	2	2	—	—	1	—	1
Photofinishing Laboratories	316	161	11	32	19	n.a.	23	3	11	1	13	9	19	1	3	—	4	n.a.	6
Private Employment Agencies	834	474	11	20	33	n.a.	70	14	36	6	38	67	12	11	5	6	15	n.a.	16
Protective Agencies	292	111	10	24	19	n.a.	23	18	15	1	10	24	6	7	4	5	7	n.a.	8
Temporary Help Supply Services	290	118	8	13	17	n.a.	8	25	12	—	15	27	6	9	3	9	8	n.a.	12

\*Includes only establishments with payrolls; non-employer firms are excluded from this statistical tabulation.

n.a.—not available

The Metropolitan Area is served by 2,900 financial institutions and insurance companies whose combined assets total over \$248 billion. Banking establishments hold assets in excess of \$150 billion, while the insurance companies hold almost \$100 billion.

As the Nation's financial center, Manhattan claims the preponderance of the Area's banking activity. Its banking complex holds aggregate assets of \$104 billion, two-thirds of the Area-wide total, and includes six of the ten largest United States banks. However, the other seventeen counties possess enormous financial resources in their own right. Banking assets exceed \$1 billion in eleven of the seventeen counties and exceed \$250 million in each of the remaining six counties.

There are 2,692 banking establishments operating in the Metropolitan Area. Of these, 1,869 are engaged in commercial banking, 299 are savings banks, while 524 are savings and loan associations.

Access to full-service banking has induced many of the Nation's largest corporations to locate in this Area. In addition to satisfying the normal banking needs of the industrial community, the Area's banks are particularly experienced in rendering financial services of an international nature. Many of the Area's banks maintain foreign departments, foreign correspondents and overseas branches. They coordinate their activities with shipping and insurance companies to assist clients in making the financial arrangements necessary in international business.

Also assisting in international commerce are the 88 foreign banks, representing 34 nations, located in Manhattan.

Savings banks and savings and loan associations currently have combined assets of \$50 billion in the Metropolitan Area. Businesses locating or expanding here will find these valuable in meeting their needs for mortgage loans.

Number of Banking Establishments in the Metropolitan Area, 1970

	Total Banks	Commercial Banks	Savings Banks	Savings & Loan
18-County Metropolitan Area	2,692	1,869	299	524
New Jersey Sector —	1,066	704	57	305
Bergen	197	126	1	70
Essex	215	133	25	57
Hudson	106	73	12	21
Middlesex	106	69	3	34
Monmouth	94	66	—	28
Morris	99	67	5	27
Passaic	86	61	1	24
Somerset	40	31	2	7
Union	123	78	8	37
New York Sector —	1,626	1,165	242	219
Manhattan	457	353	75	29
Brooklyn	200	117	65	18
Bronx	109	78	14	17
Queens	202	122	31	49
Richmond	44	18	8	18
Nassau	242	187	15	40
Suffolk	136	113	4	19
Westchester	191	141	29	21
Rockland	45	36	1	8

There are 65 life insurance companies headquartered in the Metropolitan Area, possessing assets worth more than \$89 billion. Companies in the New Jersey sector of the Metropolitan Area have \$31 billion; those on the New York side have \$58 billion. Industrialists find them to be good sources of mortgage and plant development funds. They also offer businesses protection through such programs as group life insurance, insurance continuation plans and insured pension plans.

The 132 fire and casualty insurance firms located in the Area have assets valued in excess of \$10 billion, \$9 billion of which are controlled by companies domiciled in the New York sector.

Number of Insurance Companies in the New York Metropolitan Area, 1970

	Total	Life Insurance	Fire and Casualty Insurance
Metropolitan Area	197	65	132
New Jersey Sector	32	14	18
New York Sector	165	51	114

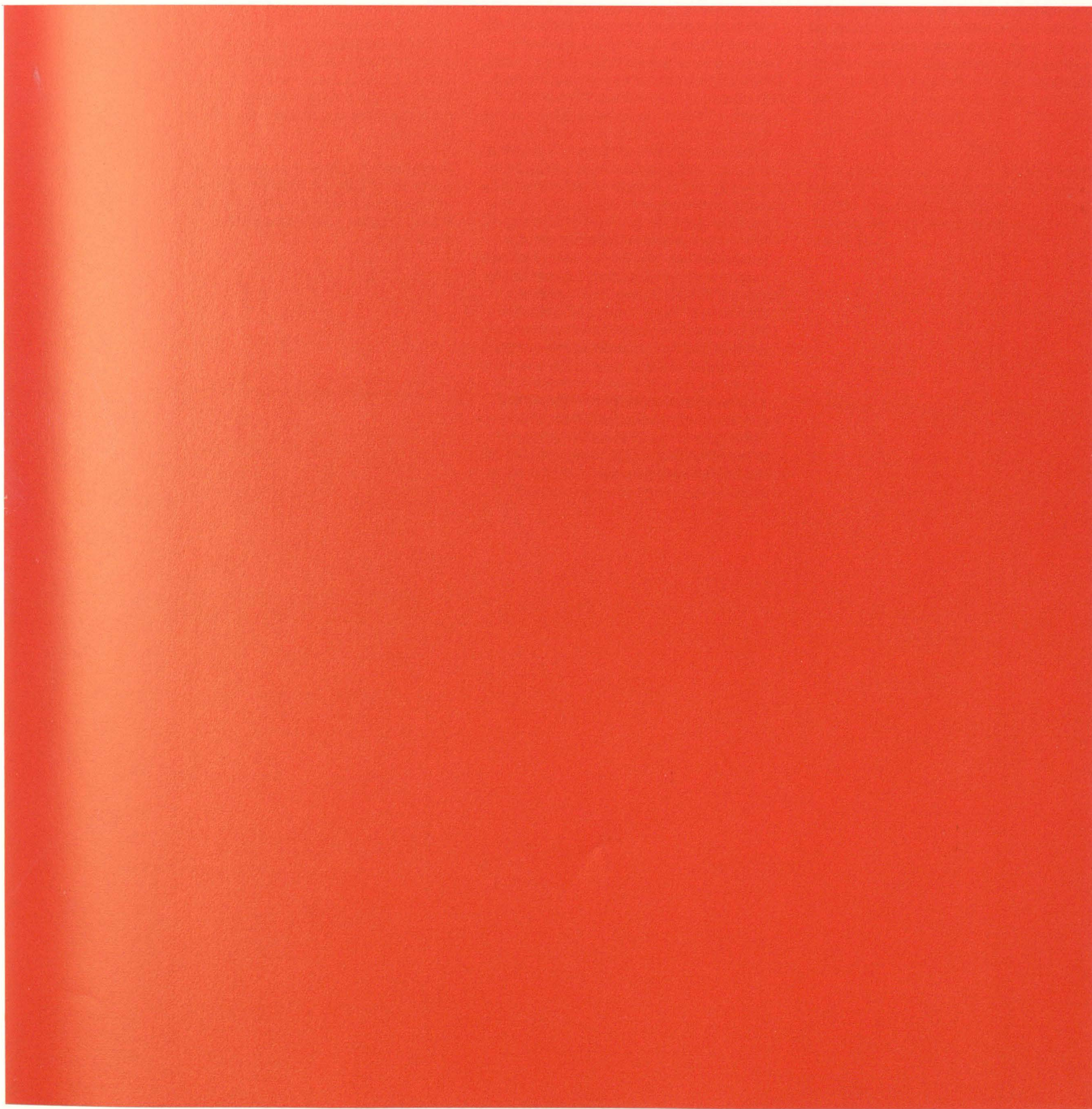
The World Trade Center, being built by The Port of New York Authority in lower Manhattan, will be the New York-Northeastern New Jersey Metropolitan Area's premier facility of commerce. The first of the Center's two 1,350-foot tower buildings opened its doors late in 1970 to the international business community. The project consists of six buildings—North and South Tower Buildings, the Northeast and Southeast Plaza Buildings, a United States Customs Building and a hotel. These structures will surround a five-acre landscaped plaza when construction is completed in 1973.

The Trade Center's prime purpose is to expand and facilitate the Area's commerce with the world. To this end, it will provide a convenient, unified transaction center for the world trade community: exporters, importers, manufacturers, freight forwarders, customs brokers, international banks, government agencies, and other organizations concerned with foreign trade. Their activities will be coordinated under one roof, providing a complete range of world trade services.

While The World Trade Center is designed to serve buyers and sellers throughout the world, it offers particular advantages to manufacturers located in the Metropolitan Area. To these manufacturers, the Center will offer an extraordinary concentration of international business contacts. In addition, its World Trade Information Service will provide for its tenants an important means of keeping abreast with the world marketing situation.







The major levies on general business in New Jersey are the corporate business tax (on both net income and net worth), a sales and use tax, and real and tangible business personal property taxes.

Allocable corporate net income is taxed at the rate of 4.25 per cent and allocable corporate net worth is taxed at rates ranging from two mills per dollar on the first \$100 million to two-tenths of one mill per dollar on net worth over \$300 million. The minimum tax payable is \$25 for domestic corporations and \$50 for foreign corporations. Tangible personal property used in business (excluding inventories) is subject to tax at the State level at the rate of \$1.30 per \$100 of the taxable value (50 per cent of the original cost). Real property tax rates among municipalities vary considerably in New Jersey as in other states. The sales and use tax in New Jersey is levied at the State level. The current rate is five per cent. Materials used in production are exempt, but manufacturing machinery and equipment and supplies are taxable.

The New Jersey Division of Economic Development publishes a Fact Sheet titled "State Tax Climate" which provides information regarding all taxes in the State. It will also arrange to provide specific tax information on request.

The New Jersey Taxpayers Association, 104 North Broad Street, Trenton, New Jersey 08625, publishes an annual booklet "Financial Statistics of New Jersey Local Government," which provides complete details regarding the local tax rates of every municipality in the State.

Prepared in the New Jersey State Department of Labor & Industry, Division of Economic Development, John Fitch Plaza, Trenton, New Jersey 08625, June, 1971.

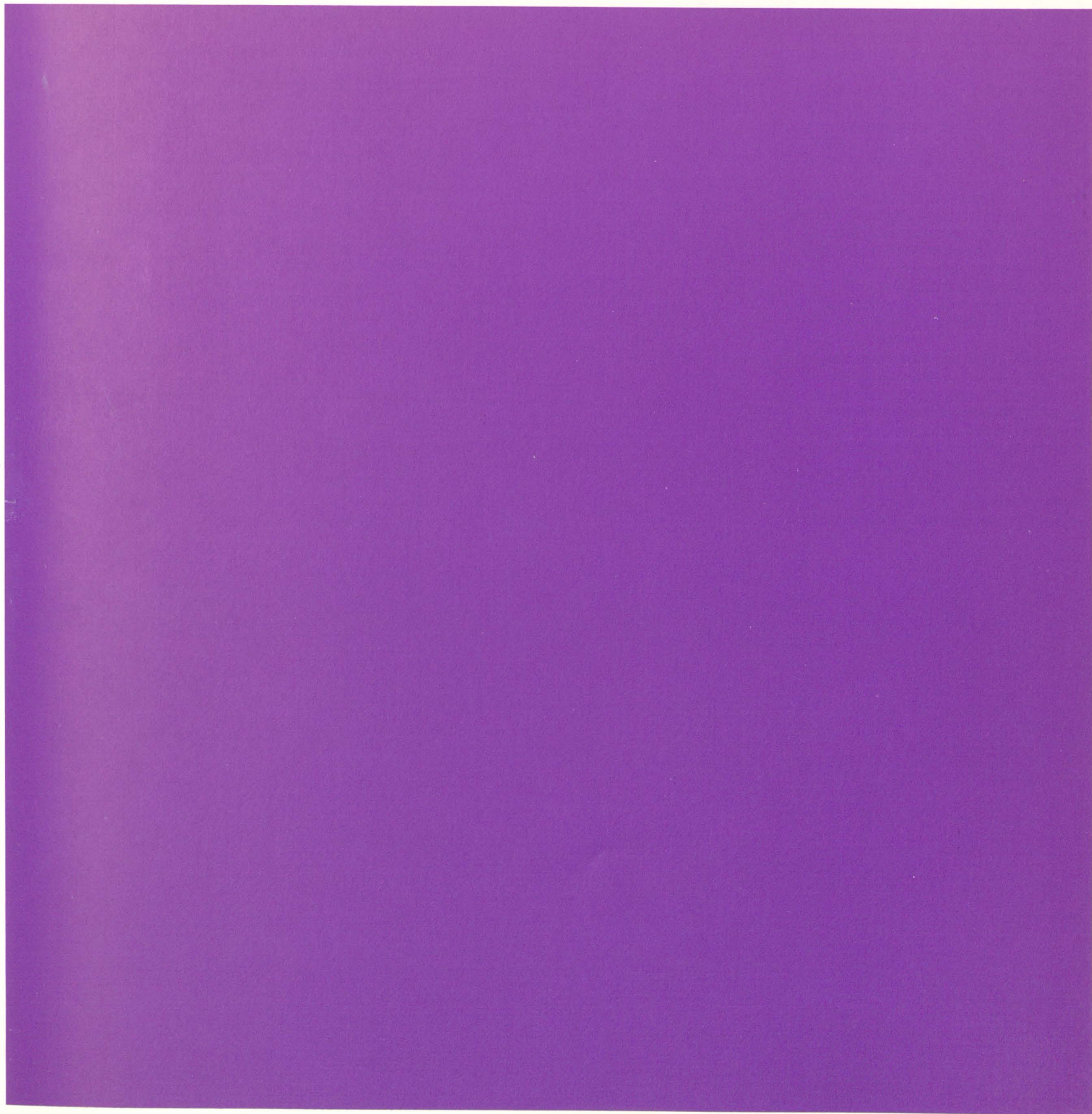
The principal taxes on business are those levied on net income, sales and real property. New York does not tax personal property.

The State corporate franchise tax is levied on net income (with alternative methods of computation). Only one municipality, New York City, imposes a local tax on corporate income. The State tax is nine per cent of net taxable income allocated to New York State. The New York City tax is 6.7 per cent of all such income allocated to the City. The State sales and use tax is four per cent. Local rates are three per cent in New York City and Yonkers, and two per cent in Nassau and Suffolk Counties. There is no local sales tax in Rockland County or in Westchester outside the City of Yonkers. Machinery, equipment, utilities and materials used in production are exempt from the State tax. Manufacturing supplies are also exempt from local sales taxes outside New York City; but machinery and equipment as well as supplies are subject to the local tax in New York City. Real property tax rates vary from community to community. Among the cities in the Metropolitan Area, the 1970 rate per \$1,000 of full value varied from \$33.93 in Queens to \$60.63 in Long Beach.

As part of its confidential industrial location service, the New York State Department of Commerce will prepare, for business firms, estimates of state and local taxes to which the firm would be subject in specific locations which are being considered both in New York and in other states.

Prepared in the New York State Department of Commerce, Division of Economic Research & Statistics, 112 State Street, Albany, New York 12207, June, 1971.





## Agencies Serving the Industrial Prospect

In this Guide, we have focused on the industrial environment of the New York-Northeastern New Jersey Metropolitan Area. The industrial prospect will require localized information covering site availability, zoning, water, sewerage, transportation, labor, fuel, taxation, and educational, recreational, and cultural services at the community level.

For such detailed information, the industrialist can turn to state, regional, county, and local agencies listed in the following pages. Previous sections described the informational services of The Port of New York Authority, utilities, and other agencies concerning transportation, energy, and commerce.

A number of Metropolitan Area communities have established separate urban renewal agencies to implement plans for redevelopment. While these agencies are not listed here, the local planners or industrial development agencies will assist the industrial prospect in contacting them and in determining the availability of commercial and industrial space in these renewal areas.

**At the State Level: New Jersey**

New Jersey State Department of Labor  
and Industry  
Division of Economic Development  
Bureau of Commerce  
Labor and Industry Building, Room 705  
P.O. Box 2766  
Trenton, New Jersey 08625

New Jersey Manufacturers Association  
North Jersey Office  
50 Park Place  
Newark, New Jersey 07102

New Jersey State Chamber of Commerce  
Economic Development Committee  
54 Park Place  
Newark, New Jersey 07102

**New York**

New York State  
Department of Commerce  
230 Park Avenue  
New York, New York 10017

Empire State Chamber of Commerce  
330 West 42nd Street  
New York, New York 10036

**For Information Concerning  
Environmental Protection:**

New Jersey State Department of  
Environmental Protection  
P.O. Box 1390  
Trenton, New Jersey 08625

New Jersey Manufacturers Association  
Committee for Air and Water Quality  
50 Park Place  
Newark, New Jersey 07101

New York State Department of  
Environmental Conservation  
30 Rockefeller Plaza, Room 1415  
New York, New York 10020

New York City Environmental  
Protection Administration  
2358 Municipal Building  
New York, New York 10007

At the County Level:

Bergen	Bergen County Economic Resources and Development Commission 45 Essex Street Hackensack, New Jersey 07601	Passaic	Passaic County Planning Board County Administration Building 317 Pennsylvania Avenue Paterson, New Jersey 07503
	Bergen County Planning Board 29 Linden Street Hackensack, New Jersey 07601		Somerset
	Bergen County Chamber of Commerce 661 Main Street Hackensack, New Jersey 07601	Somerset County Planning Board Administration Building Somerville, New Jersey 08876	
Essex	Essex County Department of Planning—Economic Development—Conservation 520 Belleville Avenue Building No. 3 Belleville, New Jersey 07109	Union	Union County Planning Board County Court House Elizabeth, New Jersey 07207
	Essex County Planning Board 520 Belleville Avenue Belleville, New Jersey 07109		Chamber of Commerce of Eastern Union County Winfield Scott Hotel 323 North Broad Street Elizabeth, New Jersey 07208
	Greater Newark Chamber of Commerce 1180 Raymond Boulevard, Room 2720 Newark, New Jersey 07102		Plainfield Area Chamber of Commerce 205 Park Avenue Plainfield, New Jersey 07060
Hudson	Hudson County Planning Board Administration Building 595 Newark Avenue Jersey City, New Jersey 07306		
	Hoboken-North Hudson Area Chamber of Commerce 20 Hudson Place Hoboken, New Jersey 07030		
Middlesex	Middlesex County Planning Board County Administration Building New Brunswick, New Jersey 08901		
	Commissioner, Middlesex County Department of Industrial and Economic Development County Administration Building New Brunswick, New Jersey 08901		
Monmouth	Monmouth County Planning Board Industrial Development Department Hall of Records Annex Court Street & Lafayette Place Freehold, New Jersey 07728		
Morris	Morris County Department of Industrial Development County Court House Morristown, New Jersey 07960		
	Morris County Planning Board County Court House Morristown, New Jersey 07960		
	Morris County Chamber of Commerce 10 Park Place Morristown, New Jersey 07960		

New York City	New York City Economic Development Administration Department of Commerce and Industry 415 Madison Avenue New York, New York 10017	Nassau	Nassau County Department of Commerce & Industry Executive Building West Street Mineola, New York 11501
	New York City Planning Commission 2 Lafayette Street New York, New York 10007		Nassau County Planning Commission County Office Building 240 Old Country Road Mineola, New York 11501
	Economic Development Council of New York City, Inc. 230 Park Avenue New York, New York 10017	Suffolk	Suffolk County Department of Commerce & Industry Veterans Memorial Highway Hauppauge, New York 11787
	New York City Public Development Corporation 217 Broadway New York, New York 10007		Suffolk County Planning Department Veterans Memorial Highway Hauppauge, New York 11787
	New York Board of Trade 642 Fifth Avenue New York, New York 10019	Rockland	Rockland County Planning Board New Hempstead Road New City, New York 10956
	Commerce and Industry Association of New York 99 Church Street New York, New York 10007		Rockland County Advisory Board on Industrial Development County Office Building New City, New York 10956
	Bronx Board of Trade and Chamber of Commerce 226 East Fordham Road Bronx, New York 10458	Westchester	Rockland County Association 135 South Middletown Road Nanuet, New York 10954
	Brooklyn Chamber of Commerce 26 Court Street Brooklyn, New York 11201		Westchester County Department of Planning 910 County Office Building White Plains, New York 10601
	New York Chamber of Commerce 65 Liberty Street New York, New York 10005		Westchester County Association 235 Mamaroneck Avenue White Plains, New York 10601
	Queensboro Chamber of Commerce 24-16 Bridge Plaza South Long Island City, New York 11101		Westchester Development Corporation 1 North Broadway White Plains, New York 10601
	Staten Island Chamber of Commerce 130 Bay Street Staten Island, New York 10301		
Long Island	Nassau-Suffolk Regional Planning Board Veterans Memorial Highway Hauppauge, New York 11787		
	Long Island Association of Commerce & Industry 131 Jericho Turnpike Jericho, New York 11753		

**Local Agencies Bergen County**

Allendale Planning Board  
290 Franklin Turnpike  
Allendale, New Jersey 07401

Alpine Planning Board  
Church Street  
Alpine, New Jersey 07620

Bergenfield Planning Board  
198 North Washington Avenue  
Bergenfield, New Jersey 07621

Bogota Planning Board  
375 Larch Avenue  
Bogota, New Jersey 07603

Carlstadt Redevelopment  
500 Madison Street  
Carlstadt, New Jersey 07072

Cliffside Park Planning Board  
349 Palisade Avenue  
Cliffside Park, New Jersey 07010

Closter Planning Board  
295 Closter Dock Road  
Closter, New Jersey 07624

Cresskill Planning Board  
67 Union Avenue  
Cresskill, New Jersey 07626

Demarest Planning Board  
118 Serpentine Road  
Demarest, New Jersey 07627

Dumont Planning Board  
P. O. Box 128  
Dumont, New Jersey 07628

Office of the Mayor  
Municipal Building  
Market Street  
East Paterson, New Jersey 07407

East Rutherford Planning Board  
Paterson Avenue & Everett Place  
East Rutherford, New Jersey 07073

Edgewater Planning Board  
916 River Road  
Edgewater, New Jersey 07020

Emerson Planning Board  
Municipal Building  
Linwood Avenue  
Emerson, New Jersey 07630

Englewood Chamber of Commerce  
49 North Dean Street  
Englewood, New Jersey 07631

Englewood Cliffs Planning Board  
Englewood Cliffs, New Jersey 07632

Fair Lawn Planning Board  
8-01 Fair Lawn Avenue  
Fair Lawn, New Jersey 07410

Fairview Planning Board  
59 Anderson Avenue  
Fairview, New Jersey 07022

Fort Lee Planning Board  
Municipal Building  
309 Main Street  
Fort Lee, New Jersey 07024

Franklin Lakes Planning Board  
P. O. Box 96  
Franklin Lakes, New Jersey 07417

Garfield Planning Board  
City Hall  
Outwater Lane  
Garfield, New Jersey 07026

Glen Rock Planning Board  
Municipal Building  
Harding Plaza  
Glen Rock, New Jersey 07452

Hackensack Planning Board  
City Hall  
65 Central Avenue  
Hackensack, New Jersey 07601

Harrington Park Planning Board  
Municipal Center  
85 Harriot Avenue  
Harrington Park, New Jersey 07640

Office of the Mayor  
Municipal Building  
Hasbrouck Heights, New Jersey 07604

Haworth Planning Board  
300 Haworth Avenue  
Haworth, New Jersey 07641

Hillsdale Planning Board  
Borough Hall  
Hillsdale, New Jersey 07642

Ho-Ho-Kus Planning Board  
Borough Hall  
East Franklin Turnpike  
Ho-Ho-Kus, New Jersey 07423

Leonia Planning Board  
312 Broad Avenue  
Leonia, New Jersey 07605

Little Ferry Planning Board  
228 Main Street  
Little Ferry, New Jersey 07643

Lodi Industrial Board  
Borough of Lodi  
Lodi, New Jersey 07644

Lyndhurst Township Planning Board  
Town Hall  
Valley Brook Avenue  
Lyndhurst, New Jersey 07071

Mahwah Township Planning Board  
211 Franklin Turnpike  
Mahwah, New Jersey 07430

Maywood Planning Board  
459 Maywood Avenue  
Maywood, New Jersey 07607

Midland Park Planning Board  
280 Godwin Avenue  
Midland Park, New Jersey 07432

Montvale Planning Board  
800 Grand Avenue West  
Montvale, New Jersey 07645

Moonachie Industrial  
Development Commission  
70 Moonachie Road  
Moonachie, New Jersey 07074

New Milford Planning Board  
Borough Hall  
930 River Road  
New Milford, New Jersey 07646

North Arlington Planning Board  
214 Ridge Road  
North Arlington, New Jersey 07032

Northvale Planning Board  
204 Washington Street  
Northvale, New Jersey 07647

Norwood Planning Board  
377 High Street  
Norwood, New Jersey 07648

Oakland Economic Development Council  
Municipal Building  
201 Franklin Avenue  
Oakland, New Jersey 07436

Old Tappan Planning Board  
247 Old Tappan Road  
Old Tappan, New Jersey 07675

Oradell Planning Board  
355 Kinderkamack Road  
Oradell, New Jersey 07649

Office of the Mayor  
275 Broad Avenue  
Palisades Park, New Jersey 07650

Paramus Planning Board  
80 Route 17  
Paramus, New Jersey 07652

Park Ridge Planning Board  
Municipal Building  
55 Park Avenue  
Park Ridge, New Jersey 07656

Ramsey Planning Board  
33 North Central Avenue  
Ramsey, New Jersey 07446

Office of the Mayor  
604 Broad Avenue  
Ridgefield, New Jersey 07657

Ridgefield Park Planning Board  
234 Main Street  
Ridgefield Park, New Jersey 07660

Ridgewood Planning Board  
131 North Maple Avenue  
Ridgewood, New Jersey 07450

River Edge Planning Board  
Municipal Building  
705 Kinderkamack Road  
River Edge, New Jersey 07661

River Vale Planning Board  
Box 275  
Westwood, New Jersey 07675

Secretary  
Rochelle Park Planning Board  
30 Bennett Avenue  
Rochelle Park, New Jersey 07662

Rockleigh Planning Board  
Rockleigh Road  
Rockleigh, New Jersey 07647

Rutherford Planning Board  
Municipal Building  
176 Park Avenue  
Rutherford, New Jersey 07070

Office of the Mayor  
17 Platt Avenue  
Saddle Brook, New Jersey 07662

Office of the Mayor  
South Hackensack  
c/o Myd Realty Company  
127 Hudson Street  
Hackensack, New Jersey 07601

Teaneck Planning Board  
Municipal Building  
Teaneck, New Jersey 07666

Tenafly Planning Board  
401 Tenafly Road  
Tenafly, New Jersey 07670

Office of the Mayor  
Municipal Building  
Teterboro, New Jersey 07608

Upper Saddle River Planning Board  
376 West Saddle River Road  
Upper Saddle River, New Jersey 07458

Office of the Mayor  
Municipal Building  
15 East Prospect Street  
Waldwick, New Jersey 07463

Wallington Industrial  
Development Committee  
Municipal Building  
Wallington, New Jersey 07057

Washington Planning Board  
Municipal Office Building  
350 Hudson Avenue  
Westwood P.O., New Jersey 07675

Westwood Planning Board  
51 Jefferson Avenue  
Westwood, New Jersey 07675

Woodcliff Lake Planning Board  
188 Pascack Road  
Woodcliff Lake, New Jersey 07680

Office of the Mayor  
85 Humboldt Street  
Wood-Ridge, New Jersey 07075

Wyckoff Industrial Commission  
Memorial Town Hall  
Wyckoff, New Jersey 07481

Belleville Planning Board  
30 Marion Court  
Belleville, New Jersey 07109

Chairman  
Bloomfield Economic  
Development Committee  
37 Broad Street  
Bloomfield, New Jersey 07003

Caldwell Planning Board  
4 Westbrook Drive  
Caldwell, New Jersey 07006

Cedar Grove Planning Board  
21 Stevens Avenue  
Cedar Grove, New Jersey 07009

East Orange Planning Board  
75 Lafayette Street  
East Orange, New Jersey 07017

Essex Fells Planning Board  
178 Devon Road  
Essex Fells, New Jersey 07021

Fairfield Planning Board  
241 Fairfield Road  
Fairfield, New Jersey 07006

Office of the Mayor  
Municipal Building  
P. O. Box 66  
Glen Ridge, New Jersey 07028

Irvington Industrial  
Development Commission  
Municipal Building  
Irvington, New Jersey 07111

Livingston Planning Board  
90 North Ashby Avenue  
Livingston, New Jersey 07039

Maplewood Planning Board  
Town Hall  
Valley Street  
Maplewood, New Jersey 07040

Millburn Planning Board  
393 Wyoming Avenue  
Millburn, New Jersey 07041

Montclair Planning Board  
Municipal Building  
Upper Montclair, New Jersey 07042

Newark Industrial  
Development Corporation  
1180 Raymond Boulevard  
Newark, New Jersey 07102

North Caldwell Planning Board  
1 Sunset Drive  
North Caldwell, New Jersey 07006

Nutley Planning Board  
79 Highfield Lane  
Nutley, New Jersey 07110

Orange Planning Board  
276 Ivy Street  
Orange, New Jersey 07050

Roseland Planning Board  
Eagle Rock & Harrison Avenues  
Roseland, New Jersey 07068

South Orange Planning Board  
Village Hall  
South Orange, New Jersey 07050

Verona Planning Board  
Municipal Building  
Gould Street  
Verona, New Jersey 07044

West Caldwell Planning Board  
19 Ellis Road  
West Caldwell, New Jersey 07006

West Orange Planning Board  
531 Valley Road  
West Orange, New Jersey 07052

Bayonne Industrial Committee  
473 Broadway  
Bayonne, New Jersey 07002

Office of the Mayor  
34 Sherman Avenue  
East Newark, New Jersey 07114

Office of the Mayor  
6810 Park Avenue  
Guttenberg, New Jersey 07093

Office of the Mayor  
City Hall  
318 Harrison Avenue  
Harrison, New Jersey 07029

Housing Authority & Redevelopment  
Agency of the City of Hoboken  
400 Harrison Street  
Hoboken, New Jersey 07030

Area Development Council of Jersey City  
911 Bergen Avenue  
Jersey City, New Jersey 07306

Kearny Planning Board  
Town Hall  
402 Kearny Avenue  
Kearny, New Jersey 07032

North Bergen Planning Board  
8405 Third Avenue  
North Bergen, New Jersey 07047

Secaucus Planning Board  
Town Hall  
Secaucus, New Jersey 07094

Union City Planning Board  
4300 Palisade Avenue  
Union City, New Jersey 07087

Office of the Mayor  
City Hall  
400 Park Avenue  
Weehawken, New Jersey 07087

West New York Planning Board  
34-A 65th Street  
West New York, New Jersey 07093

Carteret Planning Board  
Borough Hall  
Cooke Avenue  
Carteret, New Jersey 07008

Cranbury Industrial Committee  
107 North Main Street  
Cranbury, New Jersey 08512

Dunellen Planning Board  
358 Second Street  
Dunellen, New Jersey 08812

East Brunswick Advisory  
Industrial Council  
575 Ryders Lane  
East Brunswick, New Jersey 08816

Edison Planning Board  
Municipal Building  
Plainfield Avenue  
Edison, New Jersey 08817

Helmetta Planning Board  
14 Erickson Avenue  
Helmetta, New Jersey 08828

Highland Park Planning Board  
9 Redcliff Avenue  
Highland Park, New Jersey 08904

Jamesburg Planning Board  
31 East Railroad Avenue  
Jamesburg, New Jersey 08831

Chairman  
Madison Township  
Industrial Commission  
P. O. Box 67  
Laurence Harbor, New Jersey 08879

Metuchen Industrial and Commercial  
Development Committee  
55 Voorhees Place  
Metuchen, New Jersey 08840

Middlesex Industrial Committee  
119 First Street  
Middlesex, New Jersey 08846

Milltown Industrial Commission  
37 Courtlandt Street  
Milltown, New Jersey 08850

Monroe Industrial Advisory Commission  
Possum Hollow Road  
Jamesburg, New Jersey 08831

New Brunswick Planning Board  
City Hall  
New Brunswick, New Jersey 08901

North Brunswick Industrial  
Development Commission  
Municipal Building  
North Brunswick, New Jersey 08902

Perth Amboy Planning Board  
553 Compton Avenue  
Perth Amboy, New Jersey 08861

Piscataway Industrial Commission  
Municipal Building  
Piscataway, New Jersey 08854

Plainsboro Planning Board  
R. D. #1  
Cranbury, New Jersey 08512

Chairman  
Sayreville Industrial Commission  
167 Main Street  
Sayreville, New Jersey 08872

South Amboy Industrial Commission  
351 Fifth Street  
South Amboy, New Jersey 08879

South Brunswick Industrial Commission  
Culver Road  
Monmouth Junction, New Jersey 08852

South Plainfield Industrial Commission  
2480 Plainfield Avenue  
South Plainfield, New Jersey 07080

South River Industrial Commission  
19 June Street  
South River, New Jersey 08882

Spotswood Borough  
77 Summerhill Road  
Spotswood, New Jersey 08884

Woodbridge Industrial  
Development Council  
c/o Mayor's Office  
1 Main Street  
Woodbridge, New Jersey 07095

Colt's Neck Industrial Commission  
Box 3  
Colt's Neck, New Jersey 07722

Eatontown Planning Board  
Municipal Building  
47 Broad Street  
Eatontown, New Jersey 07724

Farmingdale Industrial Committee  
P. O. Box 55  
Farmingdale, New Jersey 07727

Freehold Township Planning Board  
P. O. Box 930  
Freehold, New Jersey 07728

Hazlet Township Industrial Committee  
319 Middle Road  
Hazlet, New Jersey 07730

Holmdel Planning Board  
Box 371  
Holmdel, New Jersey 07733

Howell Township Industrial Committee  
P. O. Box 558  
Howell, New Jersey 07727

Little Silver Planning Board  
480 Prospect Avenue  
Little Silver, New Jersey 07739

Manalapan Township  
Industrial Committee  
P. O. Box 15  
Tennent, New Jersey 07763

Marlboro Township Industrial Committee  
P. O. Box 55  
Marlboro, New Jersey 07746

Matawan Township  
Industrial Commission  
Municipal Building  
147 Lower Main Street  
Matawan, New Jersey 07747

Middletown Township  
Economic Development Committee  
Township Hall  
Middletown, New Jersey 07748

Millstone Township Industrial Committee  
R. D. #2  
Box 173  
Englishtown, New Jersey 07726

Neptune Township  
Industrial Commission  
P. O. Box 250  
Neptune, New Jersey 07753

New Shrewsbury  
Development Committee  
24 Timisky Lane  
New Shrewsbury, New Jersey 07724  
ATTENTION: Chairman

Ocean Township Industrial Committee  
Monmouth and Deal Roads  
Oakhurst, New Jersey 07755

Oceanport Planning Board  
Box 128  
Oceanport, New Jersey 07757

Roosevelt Planning Board  
Roosevelt, New Jersey 08555

Shrewsbury Borough  
Industrial Commission  
777 Broad Street  
Shrewsbury, New Jersey 07701

Upper Freehold Township  
Planning Board  
R. D. #1  
Box 213  
Allentown, New Jersey 08501

Wall Township Industrial Committee  
2500 Municipal Court  
Wall, New Jersey 07719

Boonton Planning Board  
100 Washington Street  
Boonton, New Jersey 07005

Boonton Township Planning Board  
R. D. #1, Box 201  
Powerville Road  
Boonton, New Jersey 07005

Butler Industrial Development Committee  
Municipal Building  
Butler, New Jersey 07405

Business Administrator  
Chatham Planning Board  
Municipal Building  
Chatham, New Jersey 07928

Chatham Township Economic  
Development Committee  
24 Southern Boulevard  
Chatham, New Jersey 07928

Chester Planning Board  
Municipal Building  
Main Street  
Chester, New Jersey 07930

Chester Township Industrial Commission  
P. O. Box 398  
Chester, New Jersey 07930

Denville Township Industrial Committee  
Municipal Building  
95 East Main Street  
Denville, New Jersey 07834

Dover Industrial Committee  
Town Hall  
Dover, New Jersey 07801

East Hanover Township Planning Board  
411 Ridgedale Avenue  
Hanover, New Jersey 07936

Florham Park Industrial Committee  
Municipal Building  
Ridgevale Road  
Florham Park, New Jersey 07932

Hanover Township Planning Board  
P. O. Box 250, Route 10  
Whippany, New Jersey 07981

Harding Township Planning Board  
P. O. Box 23  
Madison, New Jersey 07940

Jefferson Township Industrial Committee  
Municipal Building  
Minnisink Road  
Lake Hopatcong, New Jersey 07849

Kinnelon Industrial  
Development Committee  
Municipal Building  
Kinnelon Road  
Kinnelon, New Jersey 07405

Lincoln Park Industrial  
Development Commission  
Municipal Building  
34 Chapel Hill Road, P. O. Box 398  
Lincoln Park, New Jersey 07035

Madison Planning Board  
Hartley Dodge Memorial Building  
Kings Road  
Madison, New Jersey 07940

Mendham Borough Industrial Committee  
Municipal Building  
Mendham, New Jersey 07945

Mendham Township Planning Board  
Brookside, New Jersey 07926

Mine Hill Township  
Industrial Commission  
235 Randolph Avenue  
Mine Hill (Dover), New Jersey 07801

Montville Industrial Commission  
Municipal Building  
River Road  
Montville, New Jersey 07045

Morris Plains Economic  
Development Committee  
531 Speedwell Avenue  
Morris Plains, New Jersey 07950

Morris Township Industrial  
Study Committee  
P. O. Box 90  
50 Woodland Avenue  
Convent Station, New Jersey 07961

Morristown Planning Board  
P. O. Box 709  
Morristown, New Jersey 07960

Mount Arlington Industrial Committee  
Municipal Building  
Mount Arlington, New Jersey 07856

Mount Olive Industrial &  
Economic Development Committee  
Municipal Building  
Route #46  
Budd Lake, New Jersey 07828

Mountain Lakes Economic  
Development Commission  
Municipal Building  
400 Boulevard  
Mountain Lakes, New Jersey 07046

Netcong Industrial Commission  
40 Main Street  
Netcong, New Jersey 07857

Parsippany-Troy Hills  
Industrial Commission  
Municipal Building  
Parsippany, New Jersey 07054

Passaic Township Economic  
Development Committee  
1802 Long Hill Road  
Millington, New Jersey 07946

Pequannock Township Industrial and  
Commercial Development Committee  
530 Turnpike  
Pompton Plains, New Jersey 07444

Randolph Township Economic  
Development Committee  
Municipal Building  
Mount Freedom, New Jersey 07970

Riverdale Planning Board  
Municipal Building  
91 Newark Pompton Turnpike  
Riverdale, New Jersey 07457

Rockaway Borough Industrial  
Development Commission  
Municipal Building  
Main Street  
Rockaway, New Jersey 07866

Rockaway Township Planning Board  
19 Mount Hope Road  
Rockaway, New Jersey 07866

Roxbury Township Industrial Committee  
Municipal Building  
230 Route #10  
Succasunna, New Jersey 07876

Victory Gardens Planning Board  
337 South Salem Street  
Victory Gardens (Dover), N. J. 07801

Washington Township Economic  
Development Committee  
Township Building  
R. F. D. #2  
Long Valley, New Jersey 07853

Wharton Industrial Commission  
50 Union Turnpike  
Wharton, New Jersey 07885

Local Agencies Passaic County

Bloomington Industrial Commission  
Municipal Building  
Hamburg Turnpike  
Bloomington, New Jersey 07403

Clifton Planning Board  
City Hall  
1187 Main Avenue  
Clifton, New Jersey 07015

Haledon Planning Board  
Municipal Building  
407 Belmont Avenue  
Haledon, New Jersey 07508

Hawthorne Planning Board  
Municipal Building  
445 Lafayette Avenue  
Hawthorne, New Jersey 07506

Little Falls Industrial Commission  
Municipal Building  
35 Stevens Avenue  
Little Falls, New Jersey 07424

North Haledon Industrial Commission  
Municipal Building  
103 Overlook Avenue  
North Haledon, New Jersey 07508

Passaic Planning Board  
City Hall  
101 Passaic Avenue  
Passaic, New Jersey 07055

Paterson Industrial Commission  
City Hall (Mayor's Office)  
155 Market Street  
Paterson, New Jersey 07505

Pompton Lakes Business &  
Industrial Committee  
Municipal Building  
25 Lenox Avenue  
Pompton Lakes, New Jersey 07442

Office of the Mayor  
Municipal Building  
106 Brown Avenue  
Prospect Park, New Jersey 07508

Ringwood Industrial Commission  
Municipal Building  
60 Margaret King Avenue  
Ringwood, New Jersey 07456

Office of the Mayor  
735 Totowa Road  
Totowa, New Jersey 07512

Wanaque Planning Board  
Municipal Building  
579 Ringwood Avenue  
Wanaque, New Jersey 07465

Wayne Industrial Commission  
Municipal Building  
475 Valley Road  
Wayne, New Jersey 07470

West Milford Industrial Committee  
Town Hall  
1480 Union Valley Road  
West Milford, New Jersey 07480

West Paterson Planning Board  
Municipal Building  
853 McBride Avenue  
West Paterson, New Jersey 07424

Somerset County

Bedminster Planning Board  
Municipal Building  
Hillside Avenue  
Bedminster, New Jersey 07921

Bernards Planning Board  
Township Hall  
15 West Oak Street  
Basking Ridge, New Jersey 07920

Bound Brook Planning Board  
Borough Hall  
110 Hamilton Street  
Bound Brook, New Jersey 08805

Branchburg Industrial Commission  
Municipal Building  
27 Cedar Grove Road  
Somerville, New Jersey 08876

Bridgewater Industrial/Economic  
Development Advisory Board  
Municipal Building  
505 Route 202-206 North  
Somerville, New Jersey 08876

Far Hills Planning Board  
Peapack Road  
Far Hills, New Jersey 07931

Industrial Coordinator  
Franklin Township Industrial  
Development Committee  
Administrative Offices  
Somerset, New Jersey 08873

Green Brook Industrial Commission  
39 Greenbrook Road  
Green Brook, New Jersey 08812

Hillsborough Industrial/Economic  
Development Commission  
Municipal Building  
Amwell Road  
Neshanic, New Jersey 08853

Manville Planning Board  
Municipal Building  
101 South Main Street  
Manville, New Jersey 08835

Millstone Planning Board  
Boro Hall  
Main Street  
Millstone, New Jersey 08849

Montgomery Industrial Commission  
P. O. Box 18  
Blawenburg, New Jersey 08504

North Plainfield Planning Board  
Municipal Building  
263 Somerset Street  
North Plainfield, New Jersey 07060

Peapack & Gladstone Planning Board  
Municipal Building  
Prospect Street  
Peapack, New Jersey 07977

Raritan Industrial Commission  
102 Second Avenue  
Raritan, New Jersey 08869

Rocky Hill Planning Board  
Borough Hall  
Princeton & Crescent Avenues  
Rocky Hill, New Jersey 08853

Somerville Planning Board  
25 West End Avenue  
Somerville, New Jersey 08876

South Bound Brook Planning Board  
Borough Hall  
12 Main Street  
South Bound Brook, New Jersey 08880

Warren Industrial/Economic  
Development Commission  
Municipal Building  
46 Mountain Boulevard  
Warren, New Jersey 07060

Watchung Planning Board  
Municipal Building  
Mountain Boulevard  
Watchung, New Jersey 07060

Berkeley Heights Planning Board  
Municipal Building  
29 Park Avenue  
Berkeley Heights, New Jersey 07922

Clark Planning Board  
Municipal Building  
Westfield Avenue  
Clark, New Jersey 07066

Cranford Real Estate Committee  
Municipal Building  
8 Springfield Avenue  
Cranford, New Jersey 07016

Elizabeth City Industrial Commission  
City Hall  
Elizabeth, New Jersey 07205

Fanwood Planning Board  
Municipal Building  
130 Watson Road  
Fanwood, New Jersey 07023

Office of the Mayor  
Municipal Building  
Center Street  
Garwood, New Jersey 07027

Secretary  
Hillside Industrial Association  
550 Broad Street  
Newark, New Jersey 07102

Kenilworth Planning Board  
Municipal Building  
567 Boulevard  
Kenilworth, New Jersey 07033

Chairman  
Industrial Development Committee  
City Hall, Room 105  
Linden, New Jersey 07036

Mountainside Planning Board  
Borough Hall  
Mountainside, New Jersey 07092

New Providence Planning Board  
Borough Hall  
1243 Springfield Avenue  
New Providence, New Jersey 07974

Executive Secretary  
Plainfield Economic  
Development Committee  
City Hall  
Plainfield, New Jersey 07060

Rahway Planning Board  
City Hall  
1470 Campbell Street  
Rahway, New Jersey 07065

Roselle Planning Board  
Borough Hall  
210 Chestnut Street  
Roselle, New Jersey 07203

Office of the Mayor  
Borough Hall  
Chestnut Street  
Roselle Park, New Jersey 07204

Scotch Plains Industrial Committee  
2282 Woodland Terrace  
Scotch Plains, New Jersey 07076

Chairman  
Springfield Industrial Development &  
Relations Committee  
Municipal Building  
Springfield, New Jersey 07081

Summit Area Chamber of Commerce  
57 Union Place  
Summit, New Jersey 07901

Union Chamber of Commerce  
2165 Morris Avenue  
Union, New Jersey 07083

Westfield Chamber of Commerce  
260 East Broad Street  
Westfield, New Jersey 07090

Office of the Mayor  
Municipal Building  
12 Gulfstream Avenue  
Winfield, New Jersey 07036

Local Agencies Nassau County

Office of the Mayor  
65 The Plaza  
Atlantic Beach Village, New York 11509

Office of the Mayor  
Baxter Estates Village  
2 Harbor Road  
Port Washington, New York 11050

Bayville Village Planning Board  
Incorporated Village of Bayville  
Village Hall  
School Street  
Bayville, New York 11709

Office of the Mayor  
Magee Plaza, Superior Road  
Bellerose, New York 11426

Brookville Village Planning Board  
38 Wheatley Road  
Brookville, New York 11545

Office of the Mayor  
200 Cedarhurst Avenue  
Cedarhurst Village, New York 11516

Office of the Mayor—Centre Island  
Police Headquarters  
Central Island Road  
Oyster Bay, New York 11771

Cove Neck Village Planning Board  
Oyster Bay, New York 11771

East Hills Village Planning Board  
20 Town Path  
East Hills, New York 11577

East Rockaway Village Planning Board  
113 Grant Avenue  
East Rockaway, New York 11518

Office of the Mayor  
2 Prospect Street  
East Williston, New York 11596

Farmingdale Village Planning Board  
60 Yoakum Street  
Farmingdale, New York 11735

Office of the Mayor  
1 Floral Boulevard  
Floral Park, New York 11101

Flower Hill Village Planning Board  
135 North Woods Road  
Manhasset, New York 11030

Freeport Village Planning Board  
46 North Ocean Avenue  
Freeport, New York 11520

Garden City Village Planning Board  
Village Hall  
Garden City, New York 11530

Glen Cove City Planning Board  
City Hall, Room 203  
Glen Cove, New York 11542

Great Neck Village Planning Board  
61 Baker Hill Road  
Great Neck, New York 11023

Great Neck Estate Village  
Planning Board  
6 North Circle  
Great Neck, New York 11021

Office of the Mayor—Great Neck Plaza  
36 Station Plaza  
Great Neck, New York 11123

Hempstead Town Local  
Development Corporation  
Hempstead Town Hall  
Main Street  
Hempstead, New York 11550

Hempstead Village Planning Board  
30 Alicia Court  
Hempstead, New York 11550

Hewlett Bay Park Village  
Planning Board  
499 Pepperidge Road  
Hewlett, New York 11557

Hewlett Harbor Village Planning Board  
499 Pepperidge Road  
Hewlett, New York 11557

Hewlett Neck Village Planning Board  
185 Alden Road  
Woodmere, New York 11598

Office of the Mayor  
127 Long Beach Road  
Island Park, New York 11558

Office of the Mayor—Kensington  
2 Nassau Drive  
Great Neck, New York 11021

Kings Point Village Planning Board  
4 West Street  
Plandome, New York 11030

Lake Success Village Planning Board  
318 Lakeville Road  
Great Neck, New York 11022

Chairman  
Laurel Hollow Village Planning Board  
Village Hall, Laurel Hollow  
Syosset, New York 11791

Lawrence Village Planning Board  
Meadow Way  
Lawrence, New York 11559

Long Beach City Planning Board  
461 Lindell Boulevard  
Long Beach, New York 11561

Lynbrook Village Planning Board  
381 Sunrise Highway  
Lynbrook, New York 11563

Malverne Village Planning Board  
88 Hawthorne Place  
Malverne, New York 11565

Office of the Mayor—Manorhaven  
33 Manorhaven Boulevard  
Port Washington, New York 11050

Massapequa Park Village  
Planning Board  
229 Oak Street  
Massapequa Park, New York 11762

Matinecock Village Planning Board  
Underhill Road  
P. O. Box 431  
Locust Valley, New York 11560

Mill Neck Village Planning Board  
P. O. Box 96  
Oyster Bay, New York 11771

Mineola Village Planning Board  
35 Crandall Drive  
Mineola, New York 11501

Office of the Mayor—Muttontown  
P. O. Box 3  
Syosset, New York 11791

Office of the Mayor  
1420 Jericho Turnpike  
New Hyde Park Village, New York 11040

Office of the Supervisor  
North Hempstead Town  
220 Plandome Road  
Manhasset, New York 11030

Village of North Hills Planning Board  
P. O. Box 11  
Manhasset, New York 11030

Old Brookville Village Planning Board  
Cedar Swamp Road  
Glen Head, New York 11545

Old Westbury Village Planning Board  
4 Rolling Hill Road  
Old Westbury, New York 11568

Town of Oyster Bay Department of  
Commerce & Industry  
Town Hall Annex  
65 Broadway  
Hicksville, New York 11801

Office of the Mayor—Oyster Bay Cove  
P. O. Box 146  
Oyster Bay, New York 11771

Plandome Village Planning Board  
29 Plandome Court  
Manhasset, New York 11030

Plandome Heights Village  
Planning Board  
29 Plandome Court  
Manhasset, New York 11030

Port Washington North Village  
Planning Board  
18 Driftwood Drive  
Port Washington, New York 11050

Rockville Centre Village  
Planning Board  
Box 150  
College Place  
Rockville Centre, New York 11571

Roslyn Village Planning Board  
1 Paper Mill Road  
Roslyn, New York 11576

Office of the Mayor  
Roslyn Estates Village  
1038 Northern Boulevard  
Roslyn, New York 11576

Office of the Mayor—Russell Gardens  
6 Tain Drive  
Great Neck, New York 11021

Office of the Mayor—Saddle Rock  
45 Shelley Lane  
Great Neck, New York 11023

Sands Point Village Planning Board  
P. O. Box 174  
Port Washington, New York 11050

Sea Cliff Village Planning Board  
Village Hall  
Sea Cliff, New York 11579

Office of the Mayor  
383 Roquette Avenue  
South Floral Park, New York 11001

Stewart Manor Village Planning Board  
28 Dover Parkway  
Stewart Manor, New York 11530

Office of the Mayor—Thomaston  
104 Susquehanna Avenue  
Great Neck, New York 11021

Upper Brookville Village Planning Board  
Wolver Hollow Road  
Oyster Bay, New York 11771

Valley Stream Village Planning Board  
45 Ella Street  
Valley Stream, New York 11580

Westbury Village Planning Board  
Village Hall  
Lincoln Place  
Westbury, New York 11590

Office of the Mayor  
494 Willis Avenue  
Williston Park Village, New York 11596

Woodsburgh Village Planning Board  
30 Piermont Avenue  
Hewlett, New York 11557

Local Agencies Suffolk County

Amityville Village Planning Board  
21 Greene Avenue  
Amityville, New York 11701

Chairman  
Asharoken Village Planning Board  
Bevin Road  
Northport, New York 11768

Babylon Town Planning Board  
200 East Sunrise Highway  
North Lindenhurst, New York 11757

Babylon Village Planning Board  
Main Street  
Babylon, New York 11702

Belle Terre Village Planning Board  
P. O. Box 457  
Port Jefferson, New York 11776

Bellport Village Planning Board  
144 South Country Road  
Bellport, New York 11713

Brightwaters Village Planning Board  
130 Orinoco Drive  
Brightwaters, New York 11718

Brookhaven Town Industrial Commission  
20 Medford Avenue  
Patchogue, New York 11772

Dering Harbor Village Planning Board  
Dering Harbor Village Hall  
Shelter Island, New York 11964

East Hampton Town Airport and  
Industrial Commission  
Town Hall  
159 Pantigo Road  
East Hampton, New York 11937

East Hampton Village Planning Board  
P. O. Box KKK  
East Hampton, New York 11937

Greenport Village Planning Board  
18 South Street  
Greenport, New York 11944

Head-Of-The-Harbor Village  
Planning Board  
Harbor Road  
Saint James, New York 11780

Huntington Town Planning Board  
213 Main Street  
Huntington, New York 11743

Huntington Bay Village Planning Board  
Vineyard Road  
Huntington, New York 11743

Islip Town Industrial Development  
Commission  
Passenger Terminal Building  
MacArthur Airport  
Ronkonkoma, New York 11779

Lake Grove Village Planning Board  
948 Hawkins Avenue, Box 40  
Lake Grove, New York 11755

Lindenhurst Village Planning Board  
430 South Wellwood Avenue  
Lindenhurst, New York 11757

Lloyd Harbor Village Planning Board  
Middle Hollow Road  
Lloyd Harbor, New York 11743

Nissequogue Village Planning Board  
Long Beach Road  
Saint James, New York 11780

North Haven Village Planning Board  
P. O. Box 986  
Sag Harbor, New York 11963

Northport Village Planning Board  
224 Main Street  
Northport, New York 11768

Ocean Beach Village Planning Board  
Bay Walk  
Ocean Beach, New York 11770

Old Field Village Planning Board  
Old Field Road  
Setauket, New York 11785

Patchogue Village Planning Board  
14 Baker Street  
Patchogue, New York 11772

Poquott Village Planning Board  
East Setauket, New York 11785

Port Jefferson Village Planning Board  
121 West Broadway  
Port Jefferson, New York 11777

Quogue Village Planning Board  
Village Hall  
Quogue, New York 11959

Riverhead Town Industrial Commission  
220 Roanoke Avenue  
Riverhead, New York 11901

Sag Harbor Village Planning Board  
Village Hall  
Sag Harbor, New York 11963

Saltaire Village Planning Board  
Village Hall  
Saltaire, New York 11781

Shelter Island Town Planning Board  
P. O. Box 1568  
Shelter Island, New York 11964

Shoreham Village Planning Board  
P. O. Box 389  
Shoreham, New York 11786

Smithtown Planning Board  
Main Street  
Smithtown, New York 11787

Chairman  
Southampton Town Planning Board  
Town Hall  
Montauk Highway  
Southampton, New York 11968

Southampton Village Planning Board  
11 Main Street  
Southampton, New York 11968

Southold Town Planning Board  
Main Road  
Southold, New York 11971

Village of the Branch Planning Board  
17 Cambridge Drive  
Smithtown, New York 11787

Westhampton Beach Village  
Planning Board  
P. O. Box 1071  
Westhampton Beach, New York 11978

Clarkstown Town Planning Board  
9 Oak Street  
New City, New York 10956

Haverstraw Town Planning Board  
27 New Main Street  
Haverstraw, New York 10927

Haverstraw Village Planning Board  
Village Hall  
Haverstraw, New York 10927

Hillburn Village Planning Board  
Fifth Street  
Hillburn, New York 10931

New Square Village Planning Board  
62 Washington Avenue  
Hillcrest, New York 10977

Nyack Village Planning Board  
Village Hall  
Nyack, New York 10960

Orangetown Town Planning Board  
Orangeburg Road  
Orangeburg, New York 10962

Piermont Village Planning Board  
Village Hall  
Piermont, New York 10968

Pomona Village Planning Board  
Aspen Court  
Pomona, New York 10970

Ramapo Industrial Development  
Corporation, Inc.  
52 South Main Street  
Spring Valley, New York 10977

Village of Sloatsburg Planning Board  
Village Hall  
Orange Turnpike  
Sloatsburg, New York 10974

South Nyack Village Planning Board  
29 Washington Avenue  
South Nyack, New York 10960

Spring Valley Planning Board  
Village Hall  
Spring Valley, New York 10977

Stony Point Town Planning Board  
150 Filors Lane  
Stony Point, New York 10980

Suffern Planning Board  
Municipal Building  
44 Washington Avenue  
Suffern, New York 10901

Upper Nyack Village Planning Board  
North Broadway  
Upper Nyack, New York 10960

West Haverstraw Village Planning Board  
49 Blauvelt Avenue  
West Haverstraw, New York 10993

Ardsey Village Planning Board  
505 Ashford Avenue  
Ardsey, New York 10502

Bedford Town Planning Board  
Town House  
Bedford Hills, New York 10507

Village of Briarcliff Manor  
Business Development Committee  
1111 Pleasantville Road  
Briarcliff Manor, New York 10510

Bronxville Village Planning Board  
Village Hall  
200 Pondfield Road  
Bronxville, New York 10708

Buchanan Village Planning Board  
Village Hall  
218 Westchester Avenue  
Buchanan, New York 10511

Cortlandt Town Planning Board  
Municipal Building  
Van Wyck Street  
Croton-on-Hudson, New York 10520

Croton-On-Hudson Village  
Planning Board  
Village Hall  
Van Wyck Street  
Croton-On-Hudson, New York 10520

Dobbs Ferry Village Planning Board  
Village Hall  
112 Main Street  
Dobbs Ferry, New York 10522

Eastchester Town Planning Board  
40 Mill Road  
Eastchester, New York 10709

Elmsford Village Planning Board  
Village Hall  
South Stone Avenue  
Elmsford, New York 10523

Town of Greenburgh  
Development Corporation  
333 North Central Avenue  
Hartsdale, New York 10530

Harrison Town Planning Board  
226 Harrison Avenue  
Harrison, New York 10528

Hastings-On-Hudson  
Village Planning Board  
Village Hall  
Hastings-On-Hudson, New York 10706

Irvington Village Planning Board  
Village Hall  
85 Main Street  
Irvington, New York 10533

Larchmont Village Planning Commission  
Village Hall  
Larchmont, New York 10538

Lewisboro Town Planning Board  
Town House  
South Salem, New York 10590

Mamaroneck Town Planning Board  
Town Hall  
158 West Post Road  
Mamaroneck, New York 10543

Mamaroneck Village Planning Board  
Village Hall  
169 Mount Pleasant Avenue  
Mamaroneck, New York 10543

Mount Kisco Chamber of Commerce  
Lions Ambulance Corps Building  
Kirby Plaza  
Mount Kisco, New York 10549

Mount Pleasant Town Planning Board  
49 Beekman Avenue  
North Tarrytown, New York 10591

Industrial Development Corporation of  
Mount Vernon, New York, Inc.  
Suite 205 Chamber of Commerce  
10 South Second Avenue  
Mount Vernon, New York 10550

New Castle Town Planning Board  
Town Hall  
410 King Street  
Chappaqua, New York 10514

City of New Rochelle, New York  
Department of Development  
City Hall  
515 North Avenue  
New Rochelle, New York 10801

North Castle Town Planning Board  
Town Hall  
Armonk, New York 10504

North Pelham Village Planning Board  
Village Hall  
Fifth Avenue  
Pelham, New York 10803

North Salem Town Planning Board  
Town House  
Purdys Station, New York 10578

North Tarrytown Village Planning Board  
Village Hall  
28 Beekman Avenue  
North Tarrytown, New York 10591

Ossining Town Planning Board  
Municipal Building  
Ossining, New York 10562

Ossining Village Planning Board  
Village Hall  
16 Croton Avenue  
Ossining, New York 10562

Peekskill Development Corporation, Inc.  
1014 Main Street  
Peekskill, New York 10566

Pelham Town Planning Board  
Town Hall  
Pelham, New York 10803

Pelham Manor Village Planning Board  
Village Hall  
4 Penfield Place  
Pelham Manor, New York 10803

Pleasantville Village Planning Board  
Village Hall  
48 Wheeler Avenue  
Pleasantville, New York 10570

Port Chester Chamber of Commerce  
Development Corporation  
First Westchester National Bank  
8 South Main Street  
Port Chester, New York 10573

Rye City Planning Commission  
City Hall  
Rye, New York 10580

Rye Town Planning Board  
10 Pearl Street  
Port Chester, New York 10573

Scarsdale Town Planning Board  
Town Hall  
Scarsdale, New York 10583

Somers Town Planning Board  
Town House  
Somers, New York 10589

Tarrytown Village Planning Board  
Village Hall  
21 Wildey Street  
Tarrytown, New York 10591

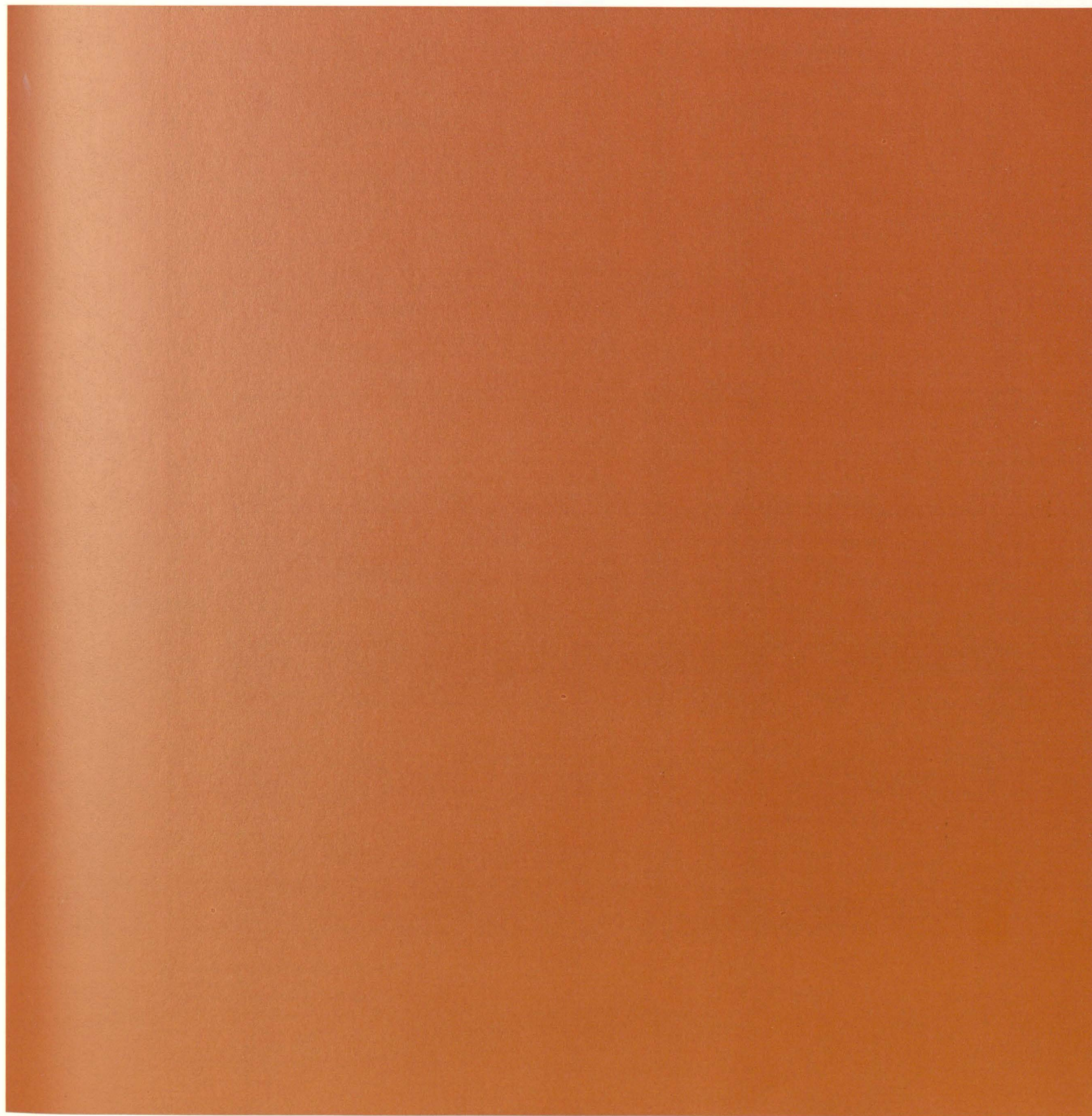
Tuckahoe Village Planning Board  
Village Hall  
Tuckahoe, New York 10707

White Plains City Planning Board  
Municipal Building  
White Plains, New York 10601

Yonkers City Planning Board  
City Hall  
Yonkers, New York 10703

Yorktown Local  
Development Corporation  
P. O. Box 160  
Yorktown Heights, New York 10598





## Appendix

This Appendix is an industrial profile of the eighteen-county Metropolitan Area containing the number of manufacturing establishments and employment for each four-digit Standard Industrial Classification (SIC).

## Industries Within the 18-County Metropolitan Area, 1967

SIC	Description	Number of Plants	Employment (000's)
Total 18-County Metropolitan Area‡		45,353	1,664.4
20	Food & Kindred Products	1,895	103.5
2011	Meat Packing Plants	29	1.3
2013	Sausages and Other Prepared Meats	173	7.9
2015	Poultry Dressing Plants	22	0.7
2021	Creamery Butter	4	0.1
2022	Cheese, Natural & Processed	23	0.5
2023	Condensed & Evaporated Milk	6	0.2
2024	Ice Cream & Frozen Desserts	56	2.6
2026	Fluid Milk	121	6.4
2031	Canned & Cured Seafoods	28	1.0
2032	Canned Specialties	14	0.4
2033	Canned Fruits & Vegetables	41	1.2
2034	Dehydrated Food Products	9	0.1
2035	Pickles, Sauces & Salad Dressings	62	1.2
2036	Fresh or Frozen Packaged Fish	18	0.5
2037	Frozen Fruits & Vegetables	34	1.3
2041	Flour & Other Grain Mill Products	3	0.1
2042	Prepared Feeds for Animals & Fowls	28	0.5
2043	Cereal Preparations	—	—
2044	Rice Milling	—	—
2045	Blended & Prepared Flour	14	0.7
2046	Wet Corn Milling	4	*
2051	Bread, Cake & Related Products	447	21.1
2052	Cookies & Crackers	54	6.6
2061	Raw Cane Sugar	—	—
2062	Cane Sugar Refining	5	2.0
2063	Beet Sugar	2	*
2071	Confectionery Products	114	7.9
2072	Chocolate & Cocoa Products	5	1.0
2073	Chewing Gum	5	1.3
2082	Malt Liquors	11	11.1
2083	Malt	—	—
2084	Wines, Brandy & Brandy Spirits	17	0.7
2085	Distilled Liquor, Except Brandy	9	0.9
2086	Bottled & Canned Soft Drinks	152	7.0
2087	Flavorings, Extracts & Syrups, nec	85	1.8
2091	Cottonseed Oil Mills	—	—
2092	Soybean Oil Mills	—	—
2093	Vegetable Oil Mills, nec	5	0.2
2094	Animal & Marine Fats & Oils	25	0.7
2095	Roasted Coffee	43	5.2
2096	Shortening & Cooking Oils	18	3.1
2097	Manufactured Ice	16	0.3
2098	Macaroni and Spaghetti	32	1.5
2099	Food Preparations, nec	161	4.4
21	Tobacco Manufactures	18	0.4
2111	Cigarettes	—	—
2121	Cigars	17	0.3

SIC	Description	Number of Plants	Employment (000's)
2131	Chewing & Smoking Tobacco	1	0.1
2141	Tobacco Stemming & Redrying	—	—
22	Textile Mill Products	1,856	60.9
2211	Weaving Mills, Cotton	35	0.9
2221	Weaving Mills, Synthetics	66	2.6
2231	Weaving & Finishing Mills, Wool	37	1.7
2241	Narrow Fabric Mills	71	1.5
2251	Women's Hosiery, Except Socks	13	0.3
2252	Hosiery, nec	7	0.2
2253	Knit Outerwear Mills	756	23.9
2254	Knit Underwear Mills	7	0.3
2256	Knit Fabric Mills	243	6.4
2259	Knitting Mills, nec	18	0.9
2261	Finishing Plants, Cotton	58	1.7
2262	Finishing Plants, Synthetics	118	6.9
2269	Finishing Plants, nec	75	1.6
2271	Woven Carpets and Rugs	1	0.1
2272	Tufted Carpets and Rugs	9	0.4
2279	Carpets and Rugs, nec	5	0.3
2281	Yarn Mills, Except Wool	10	0.2
2282	Throwing & Winding Mills	48	1.3
2283	Wool Yarn Mills	11	0.3
2284	Thread Mills	23	0.6
2291	Felt Goods, nec	8	0.2
2292	Lace Goods	60	1.5
2293	Paddings & Upholstery Filling	18	0.9
2294	Processed Textile Waste	16	0.3
2295	Coated Fabrics, Not Rubberized	62	3.2
2296	Tire Cord and Fabric	1	0.1
2297	Scouring & Combing Plants	—	—
2298	Cordage & Twine	19	0.6
2299	Textile Goods, nec	61	2.1
23	Apparel & Other Textile Products	12,472	317.3
2311	Men's & Boys' Suits & Coats	361	23.8
2321	Men's & Boys' Shirts & Nightwear	183	5.6
2322	Men's & Boys' Underwear	13	0.3
2323	Men's & Boys' Neckwear	166	3.0
2327	Men's & Boys' Separate Trousers	179	4.2
2328	Men's & Boys' Work Clothing	29	0.8
2329	Men's & Boys' Clothing, nec	154	5.9
2331	Women's & Misses' Blouses & Waists	386	10.8
2335	Women's & Misses' Dresses	2,691	76.1
2337	Women's & Misses' Suits & Coats	1,373	43.2
2339	Women's & Misses' Outerwear, nec	414	13.9
2341	Women's & Children's Underwear	471	15.9
2342	Corsets and Allied Garments	157	11.5
2351	Millinery	372	5.4
2352	Hats & Caps, Except Millinery	186	3.0
2361	Children's Dresses & Blouses	279	10.3

‡excludes Central Administrative Units

\*Less than 0.05

Totals may not add due to rounding

## Industries Within the 18-County Metropolitan Area, 1967 (cont'd)

SIC	Description	Number of Plants	Employment (000's)
2363	Children's Coats & Suits	164	5.5
2369	Children's Outerwear, nec	243	7.9
2371	Fur Goods	1,174	7.8
2381	Fabric Dress & Work Gloves	36	0.9
2384	Robes & Dressing Gowns	160	4.6
2385	Waterproof Outer Garments	175	6.0
2386	Leather & Sheep Lined Clothing	88	2.8
2387	Apparel Belts	173	3.8
2389	Apparel & Accessories, nec	115	2.7
2391	Curtains & Draperies	266	4.7
2392	House Furnishings, nec	443	10.8
2393	Textile Bags	29	0.7
2394	Canvas Products	105	1.3
2395	Pleating & Stitching	685	8.2
2396	Automotive & Apparel Trimmings	455	8.0
2397	Schiffli Machine Embroideries	560	3.9
2399	Fabricated Textile Products, nec	187	4.1
24	Lumber and Wood Products	720	9.7
2411	Logging Camps & Logging Contractors	14	*
2421	Sawmills & Planning Mills, General	31	0.4
2426	Hardwood Dimension & Flooring	15	0.1
2429	Special Product Sawmills, nec	—	—
2431	Millwork	272	3.4
2432	Veneer and Plywood	8	0.1
2433	Prefabricated Wood Structures	4	0.1
2441	Nailed Wooden Boxes and Shook	54	0.8
2442	Wirebound Boxes & Crates	9	0.1
2443	Veneer & Plywood Containers	—	—
2445	Cooperage	8	0.1
2491	Wood Preserving	2	0.1
2499	Wood Products, nec	303	4.4
25	Furniture and Fixtures	1,499	29.5
2511	Wood Household Furniture	434	5.8
2512	Upholstered Household Furniture	187	2.6
2514	Metal Household Furniture	114	3.6
2515	Mattresses & Bedspings	118	3.5
2519	Household Furniture, nec	13	0.6
2521	Wood Office Furniture	30	0.5
2522	Metal Office Furniture	31	3.6
2531	Public Building Furniture	23	0.3
2541	Wood Partitions & Fixtures	222	3.7
2542	Metal Partitions & Fixtures	135	2.7
2591	Venetian Blinds & Shades	140	1.3
2599	Furniture & Fixtures, nec	52	1.3
26	Paper and Allied Products	970	53.3
2611	Pulp Mills	—	—
2621	Paper Mills, Except Building Paper	16	1.6
2631	Paperboard Mills	23	2.6

SIC	Description	Number of Plants	Employment (000's)
2641	Paper Coating & Glazing	74	3.9
2642	Envelopes	43	3.3
2643	Bags, Except Textile Bags	121	5.3
2644	Wallpaper	36	0.7
2645	Die Cut Paper & Board	117	4.1
2646	Pressed & Molded Pulp Goods	4	0.3
2647	Sanitary Paper Products	14	1.8
2649	Converted Paper Products, nec	154	4.0
2651	Folding Paperboard Boxes	103	6.7
2652	Set-up Paperboard Boxes	87	4.5
2653	Corrugated & Solid Fiber Boxes	108	9.3
2654	Sanitary Food Containers	33	3.4
2655	Fiber Cans, Drums & Related Material	29	1.6
2661	Building Paper & Board Mills	8	0.3
27	Printing and Publishing	6,063	187.8
2711	Newspapers	362	34.1
2721	Periodicals	635	36.7
2731	Book Publishing	351	21.1
2732	Book Printing	180	5.1
2741	Miscellaneous Publishing	401	9.9
2751	Commercial Printing, Exc. Lithographic	1,878	26.7
2752	Commercial Printing, Lithographic	1,066	20.8
2753	Engraving & Plate Printing	131	2.1
2761	Manifold Business Forms	76	2.2
2771	Greeting Card Publishing	73	2.8
2782	Blankbooks & Looseleaf Binders	125	5.5
2789	Bookbinding & Related Work	327	9.8
2791	Typesetting	336	6.4
2793	Photoengraving	101	3.7
2794	Electrotyping & Stereotyping	21	0.9
28	Chemicals & Allied Products	1,753	110.5
2812	Alkalies & Chlorine	—	—
2813	Industrial Gases	20	0.5
2815	Cyclic Intermediates & Crudes	53	7.4
2816	Inorganic Pigments	19	2.1
2818	Industrial Organic Chemicals, nec	84	7.6
2819	Industrial Inorganic Chemicals, nec	59	3.1
2821	Plastics Materials & Resins	113	7.5
2822	Synthetic Rubber	1	*
2823	Cellulosic Man-made Fibers	1	0.1
2824	Organic Fibers, Noncellulosic	1	*
2831	Biological Products	16	0.5
2833	Medicinals and Botanicals	34	2.7
2834	Pharmaceutical Preparations	178	30.9
2841	Soap and Other Detergents	101	5.4
2842	Polishes & Sanitation Goods	143	3.4
2843	Surface Active Agents	44	1.8
2844	Toilet Preparations	220	17.8
2851	Paints & Allied Products	305	9.6

\*Less than 0.05

SIC	Description	Number of Plants	Employment (000's)
2861	Gum and Wood Chemicals	9	*
2871	Fertilizers	5	0.3
2872	Fertilizers, Mixing Only	9	0.1
2879	Agricultural Chemicals, nec	14	0.5
2891	Adhesives and Gelatin	47	1.4
2892	Explosives	3	1.4
2893	Printing Ink	66	2.3
2895	Carbon Black	1	0.2
2899	Chemical Preparations, nec	207	3.9
29	Petroleum and Coal Products	113	5.0
2911	Petroleum Refining	15	2.1
2951	Paving Mixtures & Blocks	46	0.8
2952	Asphalt Felts & Coatings	18	1.2
2992	Lubricating Oils & Greases	32	0.8
2999	Petroleum & Coal Products, nec	2	*
30	Rubber & Plastic Products, nec	1,045	43.2
3011	Tires and Inner Tubes	1	*
3021	Rubber Footwear	7	1.0
3031	Reclaimed Rubber	2	*
3069	Fabricated Rubber Products, nec	141	9.4
3079	Miscellaneous Plastics Products	894	32.8
31	Leather & Leather Products	1,023	41.7
3111	Leather Tanning & Finishing	91	2.1
3121	Industrial Leather Belting	7	0.1
3131	Footwear Cut Stock	51	0.9
3141	Shoes, Except Rubber	98	6.7
3142	House Slippers	58	4.2
3151	Leather Gloves & Mittens	5	0.1
3161	Luggage	127	6.0
3171	Women's Handbags and Purses	342	15.3
3172	Personal Leather Goods	146	4.8
3199	Leather Goods, nec	98	1.5
32	Stone, Clay & Glass Products	881	27.6
3211	Flat Glass	1	*
3221	Glass Containers	12	3.5
3229	Pressed & Blown Glass, nec	19	0.2
3231	Products of Purchased Glass	197	3.5
3241	Cement, Hydraulic	2	0.2
3251	Brick & Structural Clay Tile	9	0.4
3253	Ceramic Wall & Floor Tile	8	0.3
3255	Clay Refractories	3	0.1
3259	Structural Clay Products, nec	3	0.3
3261	Vitreous Plumbing Fixtures	10	0.3
3262	Vitreous China Food Utensils	5	*
3263	Fine Earthenware Food Utensils	—	—
3264	Porcelain Electrical Supplies	9	0.4
3269	Pottery Products, nec	26	0.3

\*Less Than 0.05

SIC	Description	Number of Plants	Employment (000's)
3271	Concrete Block and Brick	61	0.9
3272	Concrete Products, nec	107	2.8
3273	Ready-mixed Concrete	138	3.9
3274	Lime	—	—
3275	Gypsum Products	6	0.8
3281	Cut Stone & Stone Products	59	0.5
3291	Abrasive Products	51	1.8
3292	Asbestos Products	17	2.7
3293	Gaskets & Insulations	37	2.4
3295	Minerals, Ground or Treated	22	0.4
3296	Mineral Wool	7	0.3
3297	Nonclay Refractories	4	0.8
3299	Nonmetallic Mineral Products, nec	68	0.9
33	Primary Metal Industries	593	42.8
3312	Blast Furnaces & Steel Mills	13	0.4
3313	Electrometallurgical Products	7	0.4
3315	Steel Wire and Related Products	29	1.0
3316	Cold Finishing of Steel Shapes	8	1.4
3317	Steel Pipe and Tubes	12	1.4
3321	Gray Iron Foundries	24	2.1
3322	Malleable Iron Foundries	1	0.1
3323	Steel Foundries	10	0.8
3331	Primary Copper	6	3.7
3332	Primary Lead	—	—
3333	Primary Zinc	—	—
3334	Primary Aluminum	—	—
3339	Primary Nonferrous Metals, nec	10	0.3
3341	Secondary Nonferrous Metals	73	2.7
3351	Copper Rolling & Drawing	18	3.0
3352	Aluminum Rolling & Drawing	14	0.7
3356	Nonferrous Rolling & Drawing, nec	30	2.6
3357	Nonferrous Wire Drawing & Insulating	56	12.1
3361	Aluminum Castings	56	2.1
3362	Brass, Bronze & Copper Castings	55	1.6
3369	Nonferrous Castings, nec	62	3.6
3391	Iron & Steel Forgings	15	0.6
3392	Nonferrous Forgings	—	—
3399	Primary Metal Products, nec	94	2.3
34	Fabricated Metal Products	3,447	103.3
3411	Metal Cans	32	8.5
3421	Cutlery	24	2.0
3423	Hand & Edge Tools, nec	59	2.3
3425	Hand Saws & Saw Blades	9	0.3
3429	Hardware, nec	137	4.7
3431	Metal Sanitary Ware	8	0.3
3432	Plumbing Fittings & Brass Goods	29	1.0
3433	Heating Equipment, Except Electric	66	2.9
3441	Fabricated Structural Steel	204	5.5
3442	Metal Doors, Sash & Trim	197	6.9

## Industries Within the 18-County Metropolitan Area, 1967 (cont'd)

SIC	Description	Number of Plants	Employment (000's)
3443	Fabricated Plate Work (Boiler Shops)	105	2.6
3444	Sheet Metal Work	343	8.2
3446	Architectural Metal Work	193	2.0
3449	Miscellaneous Metal Work	54	1.3
3451	Screw Machine Products	197	4.1
3452	Bolts, Nuts, Rivets & Washers	56	5.6
3461	Metal Stampings	388	13.3
3471	Plating & Polishing	450	7.0
3479	Metal Coating & Allied Services	254	2.9
3481	Miscellaneous Fabricated Wire Products	230	5.6
3491	Metal Barrels, Drums & Pails	17	1.5
3492	Safes & Vaults	—	—
3493	Steel Springs	4	0.2
3494	Valves & Pipe Fittings	70	5.1
3496	Collapsible Tubes	5	1.2
3497	Metal Foil & Leaf	22	1.1
3498	Fabricated Pipe and Fittings	42	1.8
3499	Fabricated Metal Products, nec	252	5.3
35	Machinery, Except Electrical	3,505	95.9
3511	Steam Engines and Turbines	3	0.1
3519	Internal Combustion Engines, nec	6	0.1
3522	Farm Machinery	9	0.1
3531	Construction Machinery	24	0.6
3532	Mining Machinery	7	0.2
3533	Oil Field Machinery	4	0.3
3534	Elevators & Moving Stairways	18	5.6
3535	Conveyors & Conveying Equipment	37	1.4
3536	Hoists, Cranes & Monorails	9	0.2
3537	Industrial Trucks & Tractors	23	0.4
3541	Machine Tools, Metal Cutting Types	85	1.1
3542	Machine Tools, Metal Forming Types	35	0.5
3544	Special Dies, Tools, Jigs & Fixtures	688	7.8
3545	Machine Tool Accessories	95	2.4
3548	Metalworking Machinery, nec	33	2.7
3551	Food Products Machinery	58	1.2
3552	Textile Machinery	90	1.8
3553	Woodworking Machinery	5	0.3
3554	Paper Industries Machinery	36	2.0
3555	Printing Trades Machinery	148	8.7
3559	Special Industry Machines, nec	141	7.2
3561	Pumps & Compressors	47	3.8
3562	Ball & Roller Bearings	11	4.9
3564	Blowers & Fans	26	1.6
3565	Industrial Patterns	72	0.4
3566	Power Transmission Equipment	47	1.8
3567	Industrial Furnaces & Ovens	29	1.0
3569	General Industrial Machinery, nec	114	3.6
3572	Typewriters	12	0.7
3573	Electronic Computing Equipment	18	3.9
3574	Calculating & Accounting Machines	8	0.3

SIC	Description	Number of Plants	Employment (000's)
3576	Scales & Balances	12	1.4
3579	Office Machines, nec	41	3.5
3581	Automatic Merchandising Machines	24	1.7
3582	Commercial Laundry Equipment	14	0.7
3585	Refrigeration Machinery	70	5.2
3586	Measuring & Dispensing Pumps	—	—
3589	Service Industry Machines, nec	64	1.8
3599	Misc. Machinery, Exc. Electrical	1,342	15.1
36	Electrical Equipment & Supplies	1,994	199.6
3611	Electric Measuring Instruments	101	7.0
3612	Transformers	22	1.6
3613	Switchgear & Switchboard Apparatus	67	6.3
3621	Motors and Generators	37	4.8
3622	Industrial Controls	48	1.2
3623	Welding Apparatus	9	0.3
3624	Carbon & Graphite Products	11	0.4
3629	Electrical Industrial Apparatus, nec	40	2.2
3631	Household Cooking Equipment	8	1.3
3632	Household Refrigerators & Freezers	3	0.1
3633	Household Laundry Equipment	2	0.1
3634	Electric Housewares & Fans	55	3.3
3635	Household Vacuum Cleaners	6	0.2
3636	Sewing Machines	50	4.3
3639	Household Appliances, nec	9	0.9
3641	Electric Lamps	24	5.7
3642	Lighting Fixtures	361	13.2
3643	Current-carrying Wiring Devices	82	7.0
3644	Noncurrent-carrying Wiring Devices	29	3.3
3651	Radio & TV Receiving Sets	75	7.5
3652	Phonograph Records	108	3.3
3661	Telephone & Telegraph Apparatus	24	2.8
3662	Radio & TV Communication Equipment	233	70.9
3671	Electron Tubes, Receiving Type	11	1.3
3672	Cathode Ray Picture Tubes	6	4.9
3673	Electron Tubes, Transmitting	12	2.0
3674	Semiconductors	34	7.0
3679	Electronic Components, nec	348	28.6
3691	Storage Batteries	9	1.4
3692	Primary Batteries, Dry & Wet	4	0.8
3693	X-ray Apparatus & Tubes	25	1.3
3694	Engine Electrical Equipment	27	2.2
3699	Electrical Equipment, nec	114	2.3
37	Transportation Equipment	424	84.8
3711	Motor Vehicles	7	15.0
3712	Passenger Car Bodies	1	*
3713	Truck & Bus Bodies	39	0.8
3714	Motor Vehicle Parts & Accessories	93	3.8
3715	Truck Trailers	4	0.4
3721	Aircraft	8	34.5

\*Less Than 0.05

SIC	Description	Number of Plants	Employment (000's)
3722	Aircraft Engines & Engine Parts	12	6.9
3723	Aircraft Propellers & Parts	2	0.1
3729	Aircraft Equipment, nec	92	15.2
3731	Ship Building & Repairing	54	4.8
3732	Boat Building & Repairing	95	1.7
3741	Locomotives & Parts	1	0.1
3742	Railroad and Street Cars	6	0.8
3751	Motorcycles, Bicycles & Parts	7	0.6
3791	Trailer Coaches	1	*
3799	Transportation Equipment, nec	2	0.1
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38	Instruments and Related Products	891	44.2
3811	Engineering & Scientific Instruments	114	5.1
3821	Mechanical Measuring Devices	102	5.3
3822	Automatic Temperature Controls	12	0.9
3831	Optical Instruments & Lenses	71	1.6
3841	Surgical & Medical Instruments	50	3.9
3842	Surgical Appliances & Supplies	111	5.8
3843	Dental Equipment & Supplies	66	1.7
3851	Ophthalmic Goods	115	3.1
3861	Photographic Equipment & Supplies	131	9.3
3871	Watches and Clocks	76	5.9
3872	Watchcases	43	1.6
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39	Miscellaneous Manufacturing Industries	4,176	99.6
3911	Jewelry, Precious Metal	827	12.3
3912	Jewelers' Findings & Materials	77	1.4
3913	Lapidary Work	186	1.1
3914	Silverware & Plated Ware	58	1.3
3931	Musical Instruments & Parts	54	1.7
3941	Games and Toys	205	14.7
3942	Dolls	235	7.7
3943	Children's Vehicles, Except Bicycles	7	0.5
3949	Sporting & Athletic Goods, nec	94	2.6
3951	Pens and Mechanical Pencils	57	2.7
3952	Lead Pencils and Art Goods	48	2.0
3953	Marking Devices	76	1.3
3955	Carbon Paper & Inked Ribbons	26	2.2
3961	Costume Jewelry	337	7.6
3962	Artificial Flowers	126	2.0
3963	Buttons	169	2.8
3964	Needles, Pins & Fasteners	169	5.8
3991	Brooms & Brushes	88	2.7
3993	Signs & Advertising Displays	494	9.0
3994	Morticians' Goods	36	0.4
3996	Hard Surface Floor Coverings	7	0.3
3999	Miscellaneous Products, nec	800	17.5
19	Ordnance and Accessories	15	3.8
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--	Central Administrative Units	1,060	179.0



